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STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AND
MAINE LAND USE PLANNING COMMISSION

IN THE MATTER OF
CENTRAL MAINE POWER COMPANY'S
NEW ENGLAND CLEAN ENERGY CONNECT PROJECT

NATURAL RESOURCES PROTECTION ACT
SITE LOCATION OF DEVELOPMENT ACT
SITE LAW CERTIFICATION

HEARING - DAY 5
FRIDAY, APRIL 5, 2019

PRESIDING OFFICER: SUSANNE MILLER

Reported by Robin J. Dostie, a Notary Public and
court reporter in and for the State of Maine, on
April 5, 2019, at the University of Maine at
Farmington Campus, 111 South Street, Farmington,
Maine, commencing at 9:00 a.m.

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1 we'll get started with the Group 1 witnesses. We've
2 got Mr. Haynes and Ms. McMahon and if you would step
3 up to the witness table that would be great. Thank
4 you.

5 ROBERT HAYNES: Thank you for having us here
6 today. I believe we have 10 minutes to make to make
7 our presentation and Ms. McMahon will be leading that
8 off for Group 1.

9 MS. MILLER: Can you speak into the
10 microphone, please?

11 ROB HAYNES: Good morning. Thank you for
12 having us here. Group 1, I believe, has 10 minutes
13 and if we had a signal at 7 minutes or so that would
14 be wonderful. Ms. McMahon will lead off the
15 testimony.

16 MS. MILLER: Thank you.

17 JANET MCMAHON: Good morning. My name is
18 Janet McMahon. I'm an ecologist who has worked for
19 40 years doing landscape scale conservation planning
20 for public and private landowners in all corners of
21 the state. My testimony focuses on the adverse
22 impacts of habitat fragmentation that would be caused
23 by 53.5 mile long Segment 1. It is not possible to
24 build a new energy infrastructure project of this
25 size without unreasonable adverse impacts on

1 wildlife, the project is simply too big. The
2 Applicant does not acknowledge that there are
3 critical regional ecological values that will be
4 impacted by this project. The Applicant does not
5 demonstrate an understanding of basic conservation
6 biology principals such as how permanently dividing
7 large forest blocks into smaller ones or changing
8 their shape can negatively impact forest wildlife
9 species because of edge effects.

10 The proposed transmission corridor would
11 pass through the heart of western Maine mountains.
12 This region is ecologically significant for many
13 reasons. It is the largest and least fragmented area
14 of tempered forests remaining in North America and
15 some studies suggest the world. The combination of
16 mountainous terrain, high landscape diversity and
17 contiguous forest land make the region ecologically
18 significant or ecologically resilient in the face of
19 climate change. It is a globally important bird
20 area. It is the last stronghold for brook trout in
21 the eastern United States. It is a source area for
22 marten, lynx and other forest species. It is the key
23 ecological link between forests in the eastern U.S.
24 and Canada.

25 Could I have the next slide? The next

1 slide, please.

2 MS. PEASLEE: Is that the one?

3 JANET MCMAHON: Yeah. Full screen would be
4 good too. The reason these values still exist is
5 because the human footprint in the region is light.
6 The green areas on this map are the areas that are
7 relatively unfragmented and have very little
8 development and the red areas are where there is a
9 large human footprint. And those red areas, if you
10 could extend this, this is just the northern
11 Appalachian region, but if you showed the whole
12 United States, the eastern United States it would all
13 look like --

14 MR. MANAHAN: Excuse me.

15 JANET MCMAHON: -- southern Maine.

16 MR. MANAHAN: Excuse me. This is Matt
17 Manahan. Could I just ask, we're desperately trying
18 to find those in the pre-filed testimony somewhere
19 and I'm wondering what exhibit they are.

20 JANET MCMAHON: They are in -- I don't
21 remember. These documents were submitted and they're
22 in these reports.

23 Anyway, the reason these values exists is
24 because the human footprint in the region is light.
25 The area has always been forested. Public road

1 density and traffic are low --

2 MR. MANAHAN: Excuse me. I would object.
3 Until we can identify a page where they are in here
4 we're not able to find them as an exhibit anywhere.

5 MS. BENSINGER: Let's pause for a minute.

6 JANET MCMAHON: I believe I gave two reports
7 as exhibits.

8 MS. JOHNSON: I believe they're Group 1
9 Exhibits 3 and 4 or 4 and 5, I'm not sure.

10 UNIDENTIFIED SPEAKER: It's 4 and 5.

11 MS. JOHNSON: 4 and 5.

12 MR. MANAHAN: We have these reports. What
13 we're not able to find are these maps in these
14 reports.

15 JANET MCMAHON: It's in one of them. Page
16 10 of opposition paper number two.

17 MR. MANAHAN: Well...

18 JANET MCMAHON: So as I said --

19 MR. MANAHAN: We would object because it's
20 not the same as what's in the pre-filed testimony.

21 MS. BENSINGER: Is it an exhibit to your
22 testimony?

23 JANET MCMAHON: Yes, it is. I may have
24 added the word human footprint. If you want to take
25 that out just for clarity for your sake, I can't

1 remember, but other than that, that is the map that
2 is in the exhibits.

3 MS. BENSINGER: We're just going to find it.
4 We're looking for it.

5 JANET MCMAHON: I could share my copy if
6 you'd like. Figure 7.

7 MS. BENSINGER: Page 10 of Exhibit 5. Do
8 you have it, Mr. Manahan?

9 MR. MANAHAN: We do have Page 10 of Exhibit
10 5. It's hard to tell --

11 JANET MCMAHON: I'm happy to --

12 MR. MANAHAN: -- whether -- there are
13 differences. It's hard to tell whether the substance
14 is different from looking at it in a short period of
15 time. For example, the one on the screen has city
16 names. It doesn't have this key on the edge.
17 It's -- it's different, so I just don't know whether
18 the substance is different.

19 JANET MCMAHON: Well, I encourage you to
20 look at Figure 7 if you prefer not to look at the one
21 on the screen, that's fine. It is the same mapped
22 information.

23 MS. MILLER: We'll just look at the figure
24 Page 10 Exhibit 5 in the pre-filed testimony, we'll
25 look at that instead. Thank you.

1 JANET MCMAHON: Okay. Thank you. So the
2 transmission corridor would cut this area in two and
3 would be the largest fragmenting feature in the
4 entire western mountain region. To put it in
5 context, it would be as wide as the I-95 corridor
6 between Augusta and Brunswick from verge to verge and
7 I know this because I actually measured that with my
8 150 foot measure tape. And three times as wide as
9 Route 201, which is the largest road in the region.

10 If you look at the map on the U.S. on the
11 lower right of what you have in front of you, you'll
12 see a white area that corresponds in northwestern
13 Maine. This is the only part of the eastern United
14 States that is not crisscrossed by major turnpikes
15 and transmission corridors.

16 May I have the next slide, please? Because
17 it is largely unfragmented the region has been
18 identified by The Nature Conservancy and other groups
19 as the key ecological length between the forest of
20 eastern Canada and those in New Hampshire and the
21 Adirondacks. The yellow arrows show the linkages in
22 this region and the most important one because
23 species are moving in both directions and it's also
24 the widest is the one that passes through this
25 region. The region serves as a source area and

1 movement corridor for many mammals such as moose,
2 marten and lynx. This means that animals can
3 disperse to the north and west and help maintain
4 populations in other areas, which is already
5 happening with marten in the White Mountains in New
6 Hampshire.

7 The next slide. The importance of this
8 region to Maine's wildlife will increase as the
9 climate warms. Its mountainous terrain and connected
10 forest blocks will allow species to move up slope or
11 to northern slopes as they shift their range in
12 response to climate change. In landscapes classified
13 as highly resilient, which is shown in dark -- the
14 darker green on this map, the habitat values for
15 wildlife are expected to remain far longer than in
16 the light green areas that are -- and are viewed as
17 critical to the future of many of Maine's most iconic
18 species. And this shows the Segment 1 is the heavy
19 purple line and you can see, again, it's bisecting
20 these resilient habitats.

21 May I have the next slide, please? The
22 transmission corridor would bisect the largest
23 globally important bird area in the United States.
24 These areas which are shown in red on this map
25 correspond to large areas of undeveloped forest land.

1 The northern forest block in Maine is considered
2 vital habitat for 34 priority song bird species whose
3 global breeding distribution is restricted to the
4 northern forest biome. Segment 1 was divided in two.

5 Next slide please. Forest fragmentation is
6 simply the breaking apart of a forested landscape
7 into a smaller and more isolated blocks. The
8 transmission corridor would convert 973 acres of
9 non-forest habitat. While this is significant the
10 corridor would negatively impact on the order of
11 20,000 to 40,000 additional acres of adjacent forest
12 land due edge effects associated with 107 miles of
13 permanent high contrast edge it would create. Forest
14 habitat near edges is generally windier, warmer and
15 gets more light leading to shifts in the kinds of
16 plants and animals that occur here. And these edge
17 effects can extend from 30 to 1,500 or more feet into
18 the adjacent forest land depending on the effect.
19 And I'll go into these two blocks in a little more
20 detail in a minute.

21 May I have the next slide? Although
22 negative edge effects have been written about
23 extensively in the literature, the Applicant does not
24 address any of them. These effects include changes
25 in species --

1 MR. MANAHAN: Excuse me. I object. Is this
2 in the record. In your rebuttal testimony or direct
3 testimony?

4 JANET MCMAHON: Word for word, I don't know.

5 MR. MANAHAN: No, this -- this exhibit.

6 JANET MCMAHON: Oh. Oh, I added -- well,
7 what I did was overlay a piece of mine on what -- one
8 of the images on the segment. I don't know if that's
9 legitimate, but I thought it would be more
10 informative for you to see what it would actually
11 look like on this part of the segment. Is that not
12 allowed?

13 MR. MANAHAN: I object to this document
14 being admitted because it's not in the pre-filed
15 testimony.

16 JANET MCMAHON: That was for your benefit.
17 If that's -- if that's not the case, I don't know if
18 there is a bulletin board I could write on.

19 MS. MILLER: We're going to have to strike
20 it. The idea is that what was in the pre-filed
21 testimony is what you should be summarizing right
22 now.

23 JANET MCMAHON: My own testimony, so I
24 cannot use anything the Applicant submitted?

25 MS. MILLER: No.

1 JANET MCMAHON: Okay.

2 MS. MILLER: Thank you.

3 MR. MANAHAN: I also -- just for the record,
4 I have -- I have a standing objection of the use of
5 the exhibits that are close to what's in the
6 pre-filed. The prior -- the prior exhibits were sort
7 of in the pre-filed in some fashion but she marked
8 them up, so to the extent that they're marked up and
9 changed from what was in the pre-filed I object to
10 that, otherwise, I don't object.

11 JANET MCMAHON: Well, I was adding my
12 language from my testimony onto those, is that not
13 okay?

14 MS. BENSINGER: The exhibits are supposed to
15 be the ones you've filed in your pre-filed testimony.

16 JANET MCMAHON: Okay.

17 MS. BENSINGER: But this one has been
18 stricken. The others are in.

19 JANET MCMAHON: All right. Well, I'll try
20 to explain then. All right. So, again, the
21 Applicant doesn't address any of the negative effects
22 that are talked about in the literature. These
23 effects include changes in species composition and
24 behavior, changes in soil and water chemistry,
25 encroachment by invasives and many more. Instead,

1 the applicant focuses primarily on species that can
2 live in the shrub/scrub habitat or meadow habitat of
3 the corridor itself. This adjacent forest edge
4 habitat will support generalist species like skunks,
5 foxes, raccoons, dogs and cats, and weedy plant
6 species that can survive in disturbed areas. We have
7 plenty of this habitat in Maine. What we've lost in
8 much of southern Maine are large connected forest
9 blocks free of invasive species that support interior
10 and forest specialized species like pine marten, wood
11 thrush, oven bird, barred owl and a host of other
12 plant -- plants and animals. A vivid example of how
13 species composition can change in and along
14 transmission corridors can be seen, when you leave
15 Maine on the Turnpike under these corridors you'll
16 see monocultures of the 10 foot tall grass called
17 phragmites, which has completely displaced the native
18 species that used to grow under the transmission
19 lines and it's expanding into adjacent wetlands and
20 forests.

21 Breaking large blocks of forests into
22 smaller ones creates more edge and reduces overall
23 forest connectivity. Smaller blocks have
24 disproportionately more edge and when blocks become
25 too small negative edge effects may extend all the

1 way through the block. And I'll try to explain
2 what's up there. Basically, where the corridor is
3 going it's going to break blocks of intact forest
4 land into smaller ones and when you do that some of
5 those smaller blocks, a number of them, are going to
6 basically turn into all edge so that those edge
7 effects are not going to affect not just what's right
8 adjacent to the corridor but it's going to create new
9 isolated blocks with more edge.

10 Actually, I might as well -- we'll skip the
11 next slide too because it's like this. The Applicant
12 doesn't address the number or size of forest blocks
13 fragmented by the transmission corridor or how a
14 block's shape influences the amount of edge. The
15 more linear and convoluted the block, the more edge
16 it will have. Where the corridor parallels existing
17 roads like Spencer Road all the land in between would
18 be impacted by negative edge effects. And what my
19 slide would have showed is there is many places where
20 the corridor is like maybe 300 feet away from Spencer
21 Road or 500 feet away from Spencer Road and the edge
22 effects are going to penetrate completely into all
23 the land in between those two because that's how edge
24 effects work. So when it does that it will create
25 habitat or species that do well in forest edges at

1 the expense of those that don't. Reducing the size
2 of blocks and changing their shape would impact
3 thousands of acres of adjacent forest with major
4 impacts on forest wildlife.

5 Segment 1 would cross 89 perennial streams,
6 215 intermittent streams and 480 wetlands, most of
7 which are in mountain headwater areas. The catchment
8 or drainage areas of these headwater streams and
9 wetlands are what determine nutrient levels,
10 temperature and other characteristics critical to the
11 overall health of cold water stream ecosystems. The
12 accumulation processing and eventual downstream
13 transport of organic material is an important energy
14 transfer process that influences the entire
15 watershed. Siting a 53.5 mile transmission line
16 through the mountainous headwaters of the Kennebec
17 would have a regional impact on downstream aquatic
18 habitats. Proposed buffer strips along streams and
19 around wetlands are insignificant to protect these
20 critical headwater catchment areas.

21 Okay. Could you skip the next two slides?
22 Recent work by Haddad and others showed the direct
23 correlation between forest species diversity and
24 distance from the edges of energy infrastructure and
25 major roads. As distances to edge decrease

1 populations of forest interior species decline. This
2 figure shows the distribution of large habitat
3 blocks, which in northwestern Maine are currently
4 defined by permanent roads. You can see that a high
5 proportion position of the western Maine mountain
6 region is more than 3,000 feet from an edge. That
7 graph on the right, that red bar -- that green bar,
8 it's really hard to read, but that's greater than
9 1,000 meters, the percentage, which is about almost
10 50 percent, is greater than 3,000 feet from an edge
11 whereas in southern Maine most forests are within 500
12 to 700 feet of and edge. And, again, you can see the
13 ground bars on the left side of the lower one, which
14 is southern Maine. And you can see that just by
15 looking at the large green blocks are in the western
16 Maine mountains in northern Maine, which is not a
17 surprise.

18 In conclusion, the Applicant fails to
19 mention let alone address how the transmission
20 corridor would impact the unique ecological values of
21 the region, the fact that it is a stronghold for
22 brook trout, a globally important bird area or a
23 critical ecological linkage of continental
24 significance the Applicant doesn't distinguish
25 between the needs of forest interior species and the

1 generalist species that thrive in our town centers
2 and suburbs. This is not what is at stake. This is
3 a new major transmission corridor that would
4 permanently fragment the forest of the region. It
5 would also be the largest fragmenting feature this
6 part of the state has ever seen. As I said in the
7 beginning, you cannot build a project of this scale
8 without having unreasonable adverse impacts on the
9 existing natural resources of the western Maine
10 mountains, one of DEP's permitting requirements.
11 Thank you.

12 MS. MILLER: Thank you. Mr. Haynes, just a
13 few minutes.

14 ROBERT HAYNES: Thank you. I will keep it
15 short and tight and if -- I'll probably skip the who
16 we are as far as the scenic byway goes and if anybody
17 in the cross-examination process would like to make
18 that a question I can fill in as we have plenty of
19 time for cross-examination.

20 Old Canada Road is a National Scenic Byway
21 selected by the Director of the Transportation
22 Commission in Washington. Our mission is that Old
23 Canada Road Scenic Byway will strive with broad civic
24 and business partnerships to educate residents and
25 traveling about the area history, culture and natural

1 features while promoting traditional scenic
2 integrity. Anyone familiar with the Old Canada Road,
3 which is Solon to the border has seen a number of
4 interpretive panels going up some new trails, so
5 we're trying to keep people in the area a little
6 longer and spend a little money.

7 And I'll move right on to our statement. We
8 do not believe that the Applicant has met the
9 criteria in the chapters for proper consideration of
10 scenic character and existing uses. In Chapter 315
11 Section 10, the Department considers scenic resources
12 a typical point from which an activity in, on or
13 adjacent to a protected natural resource is viewed.
14 The list of natural resources includes but is not
15 limited to locations of national, state or local
16 scenic significance; a scenic resource visited by
17 large numbers who come from across the country or
18 state is generally considered to have natural --
19 national or state significance; a scenic resource
20 visited primarily by people of local origin is
21 generally of local significance. The national
22 landmarks we have are the Number 5 Bog, Old Canada
23 Road could be considered a national resource and the
24 ITS trails are designated as state. Historically, we
25 have the prisoner of war camp, which was not

1 mentioned which is a visiting place where a number of
2 people, now it's the -- the children of the veterans
3 that served in that war. And for public land we have
4 Coburn Mountain public land, Moore Pond public land,
5 Number 5 Mountain trail and this is on land that's
6 not in public ownership but was purchased for the
7 benefit of the public.

8 Applicants for permits under NRPA are
9 required to demonstrate that the proposed activity
10 meets the standards of the NRPA that have been
11 established by the Legislature as Standard 1 in
12 Section 480-D and requires an applicant to
13 demonstrate that the proposed activity will not
14 unreasonably interfere with existing scenic and
15 aesthetic uses. Old Canada Road believes CMP has not
16 made significant efforts to ensure the project will
17 not interfere with scenic and aesthetic issues.
18 Under 8B, Design, when circumstances do not allow
19 siting to avoid visual impacts on a scenic resource
20 elements of particular concern should be designed in
21 a such a way that reduces or eliminates visual
22 impacts to the area in which an activity is located
23 as viewed from a scenic resource. Applicants should
24 consider a variety of design methods to mitigate
25 potential impacts including screening, buffering,

1 earthen berms, camouflage, low profile and other
2 techniques. OCR maintains that CMP did not make
3 significant design allowances to mitigate impacts to
4 scenic character or existing use.

5 MS. MILLER: Can we wrap this up?

6 ROBERT HAYNES: And our final statement --
7 right on time. Old Canada Road asserts that CMP has
8 made no effort to minimize project effects within
9 sight of OCR or any of the scenic landmarks along the
10 Spencer Road and suggests that the Maine Department
11 of Environmental Protection take appropriate action.

12 And if I could make another comment, this
13 testimony was put together a few weeks ago and in
14 light of what's been learned here this week there are
15 a number of changes that have been beneficial to Old
16 Canada Road as suggested in testimony by the
17 Applicant such as screening the crossing at Johnson
18 Mountain. I don't know what those are yet, but as
19 they weren't in the original application I would like
20 to learn more about them and I'm kind of a remedy
21 kind of guy and if there was a remedy to take place,
22 which is not the task of this meeting, I would like
23 to be involved. Thank you.

24 MS. MILLER: Thank you. One thing I wanted
25 to mention just before we start with cross is you'll

1 notice that Commissioner Reid isn't here this
2 morning. He is sorry he can't be here. He had
3 another obligation, but I just wanted to let you know
4 that he did want to be here this morning.

5 MS. BENSINGER: And he will be reading the
6 transcript. He will be listening and watching most
7 of the day and he will be reading the transcript of
8 the time -- any time he wasn't able to listen and
9 watch.

10 MS. MILLER: So we'll move on with
11 cross-examination by the Applicant.

12 MR. MANAHAN: Good morning. My name is Matt
13 Manahan for Central Maine Power. Mr. Haynes, briefly
14 for you, can you see the impacts of human activity
15 from Old Canada Road Scenic Byway?

16 ROBERT HAYNES: Yes. The impacts of
17 forestry which is a traditional use are dominant.

18 MR. MANAHAN: Yeah. Okay. Ms. McMahon, I'm
19 showing up here your exhibit from your pre-filed
20 rebuttal testimony that you referred to earlier
21 today. And you mentioned in your testimony this
22 heavy purple line, in your words, given the scale of
23 this map, how wide would you say it depicts the
24 Section 1 NECEC corridor?

25 JANET MCMAHON: Well, there is a scale at

1 the bottom. It is a graphic just like those yellow
2 arrows are not the width of the corridor, but -- so
3 it's just meant to make it obvious where it is, but
4 that scale would show you.

5 MR. MANAHAN: Does it look like maybe that's
6 50 miles wide, is that sort of -- what do you think?

7 JANET MCMAHON: It's obviously not 150.
8 It's just to draw your attention to where it is.

9 MR. MANAHAN: Where on this map does it show
10 Route 201?

11 JANET MCMAHON: It doesn't show it. That's
12 not what this map is showing.

13 MR. MANAHAN: Oh, it's not intended to show
14 fragmentation? I thought that was your testimony
15 today that it was intended to show lack of
16 fragmentation of the western Maine mountains.

17 JANET MCMAHON: These are actually the
18 resilient areas and the resiliency from a climate
19 change standpoint is a combination of landscape
20 diversity, things like wetlands, rivers, mountains,
21 elevation, gradients, and that's one of the reasons
22 this is so resilient because it is mountainous and
23 connectivity of forest. And even those, there are
24 many logging roads in the area there it is still a
25 much more connected forest than anywhere else in the

1 eastern United States, so that's what the green is
2 showing.

3 MR. MANAHAN: So it doesn't show Route 201.
4 It doesn't show Route 16?

5 JANET MCMAHON: No. Those are the two roads
6 that are in the area, but if you looked at that map
7 that showed the whole United States and the eastern
8 United States looked basically black except for this
9 area. We're talking about major roads like the
10 Turnpike.

11 MR. MANAHAN: Well, we're --

12 JANET MCMAHON: Well, that's a big road,
13 but, again, this is three times as wide, the
14 corridor, as Route 201.

15 MR. MANAHAN: How about Route 27, where is
16 that?

17 JANET MCMAHON: If you want to see a road
18 map you could put a road map up there. This is not a
19 road map. It's showing where the resilient landscape
20 is.

21 MR. MANAHAN: Okay.

22 JANET MCMAHON: Which includes those roads,
23 but there's not enough roads to reduce its
24 resiliency. It's considered highly resilient because
25 there are only Routes 201, 4, 16 and 6. That's it.

1 MR. MANAHAN: So how much vegetation would
2 you say remains on those existing roads?

3 JANET MCMAHON: Well, where they're paved
4 there is no vegetation. The verges are sprayed. So
5 when I say 50 feet, which is the rough distance of
6 201 from cleared verge to cleared verge. There is
7 grass, but that's not --

8 MR. MANAHAN: Well --

9 JANET MCMAHON: -- habitat really.

10 MR. MANAHAN: Okay. Wouldn't the NECEC
11 corridor which utilizes scrub/shrub vegetation and
12 has no regular vehicular traffic cause significantly
13 less habitat fragmentation than the existing roadways
14 that are there?

15 JANET MCMAHON: Well, it's a new fragmenting
16 feature. I mean, these roads are already causing
17 fragmentation, but also the fragmentation is
18 associated with the edge habitat and the adjacent
19 forest not just the scrub/shrub vegetation.

20 MR. MANAHAN: Does commercial forestry
21 result in the habitat fragmentation in your view?

22 JANET MCMAHON: It does, but it's temporary
23 and there is something called the shifting mosaic
24 steady state. If you look at this landscape as a
25 whole, over time you'll have a clearcut or a partial

1 cut, but regionally they'll move around over the
2 landscape and the rough proportion of those things
3 stay the same, so there is always a place for habitat
4 to move. This is not -- and that's not at permanent
5 situation like the corridor would be.

6 MR. MANAHAN: Well, let me ask you this, do
7 you know how many acres of commercial forest are
8 harvested in each year in Maine?

9 JANET MCMAHON: I don't have that number off
10 the top of my head.

11 MR. MANAHAN: In the western Maine mountain
12 region?

13 JANET MCMAHON: I don't have that number off
14 the top of my head, but I'm sure it's a lot. That's
15 the major land use in the area.

16 MR. MANAHAN: Do you know how many miles of
17 edge effect are caused by those commercial forestry
18 operations?

19 JANET MCMAHON: Well, there is edge effect
20 every time you clearcut or, you know, if you do a
21 clearcut, although, that's not a huge percentage of
22 the forest. Most of it is partially cut. But,
23 again, that's temporary. It takes three to five
24 years before I -- when I do my field work can no
25 longer walk through those clearcuts because there is

1 too many trees.

2 MR. MANAHAN: Are you aware that CMP's
3 tapering proposal is to retain existing vegetation as
4 long as it doesn't intrude into the conductor safety
5 zones?

6 JANET MCMAHON: I don't know if that was in
7 your application. Is it?

8 MR. MANAHAN: I'm asking are you -- so you
9 haven't seen it?

10 JANET MCMAHON: I've heard of it today, but
11 I did not see it in your application --

12 MR. MANAHAN: Okay.

13 JANET MCMAHON: -- but that sounds like new
14 information.

15 MR. MANAHAN: And are you aware that CMP's
16 tapering proposal is not to cut the corridor --

17 MS. TOURANGEAU: Objection. This goes
18 beyond the scope of her direct.

19 MR. MANAHAN: No, she's incorporated Dr.
20 Publicover's testimony by reference and the entirety
21 of Dr. Publicover's testimony is incorporated into
22 her rebuttal testimony.

23 JANET MCMAHON: I am aware of what that
24 means. I have looked at your --

25 MS. MILLER: Hold on.

1 MS. BENSINGER: Hold on.

2 JANET MCMAHON: Okay.

3 MR. MANAHAN: Just read the first paragraph
4 of her rebuttal testimony. It says I incorporate Dr.
5 Publicover's testimony in my reference.

6 MS. BOEPPLE: Just for sake of -- excuse me.
7 This is Elizabeth Boepple representing Groups 2 and
8 10. For the sake of the proceeding, could we please
9 just explain to the witnesses that they need to wait
10 until the Presiding Officer makes a ruling on an
11 objection?

12 JANET MCMAHON: Okay. Sorry, I haven't done
13 this before.

14 MS. BOEPPLE: Exactly. That's why I think
15 they need to explain a little bit to you. Okay.

16 MS. BENSINGER: Ms. McMahon, did you
17 incorporate Dr. Publicover's testimony into your
18 testimony?

19 MR. WEINGARTEN: Excuse me, if I can address
20 that. She incorporated Dr. Publicover's rebuttal
21 testimony not his pre-filed testimony.

22 MR. MANAHAN: That's fine. Yes. That's
23 what I'm talking about.

24 MS. BENSINGER: I'm -- I am asking did you
25 incorporate his rebuttal testimony --

1 JANET MCMAHON: Yes.

2 MS. BENSINGER: -- into your rebuttal
3 testimony?

4 JANET MCMAHON: I incorporated David
5 Publicover's testimony.

6 MS. BENSINGER: Then I would recommend to
7 the Presiding Officer that a question on that
8 rebuttal testimony be allowed and she can answer it
9 to the best of her ability.

10 MS. MILLER: Okay. I'll allow it.

11 MR. MANAHAN: And are you aware that CMP's
12 tapering proposal is not to cut edge to edge in the
13 entire corridor?

14 JANET MCMAHON: I haven't seen the details.
15 I looked at what was in the application, which is the
16 right of way vegetation maintenance procedures and I
17 have also noticed that if you do taper and allow
18 trees to grow 20 to 30 feet along the edges and still
19 cut them every time they get that high that's still
20 going to -- there is going to be the edge effect
21 until you get to that tapered zone, but also the
22 width of the safety zone is a good 100 feet if you go
23 15 feet outside of the actual -- well, the wire zone,
24 I guess. I'm looking at your diagram, but I may -- I
25 don't understand because I'm --

1 MR. MANAHAN: Right.

2 JANET MCMAHON: -- honestly this is new
3 information.

4 MR. MANAHAN: To you. It's new information
5 to you. You're not aware of it.

6 JANET MCMAHON: Not the details because I
7 haven't seen -- it's not in your vegetation
8 maintenance procedures in your --

9 MR. MANAHAN: Okay.

10 JANET MCMAHON: -- application. You may
11 have referred to it, but I have not seen exactly how
12 you spell it out.

13 MR. MANAHAN: So I'm talking about the
14 tapering proposal that he referred to and that was
15 referred to earlier. Were you here earlier this week
16 for this hearing?

17 JANET MCMAHON: No, I was not.

18 MR. MANAHAN: Okay. Are you aware that
19 CMP's tapering proposal is to extend the tapering --

20 MS. JOHNSON: I would object. I don't
21 believe that Dr. Publicover's testimony talks about
22 tapering. This is going beyond the scope of
23 testimony.

24 MS. MILLER: All right. Hold on. Hold on.

25 MR. MANAHAN: We're talking about edge

1 effects, which Ms. McMahon has specifically testified
2 that she thinks there will be adverse edge effects
3 and the tapering proposal that is directly relevant
4 to her testimony and I'm cross-examining her on
5 whether or not there will be edge effects.

6 MR. WEINGARTEN: Excuse me. But she did not
7 include --

8 MS. BENSINGER: Excuse me. Can you --

9 MR. WEINGARTEN: -- tapering in her
10 testimony.

11 MS. BENSINGER: Excuse me. Excuse me.
12 Could you please identify yourself and your group and
13 for the transcriptionist when you speak?

14 MR. WEINGARTEN: Yes. I'm -- I'm Bob
15 Weingarten with Group 1. Ms. McMahon did not address
16 tapering in either her pre-filed testimony or her
17 rebuttal testimony, so how could you question her on
18 that?

19 MS. BENSINGER: You should speak to the
20 Presiding Officer when you respond to an objection,
21 please. And the question is was tapering discussed
22 in the pre-filed -- in the rebuttal testimony?

23 MR. MANAHAN: Ms. Bensinger, it's not
24 actually. The question really is whether my line of
25 questioning is relevant cross-examination with

1 respect to her direct and rebuttal testimony. Her
2 direct and rebuttal testimony talks about how there
3 will be edge effects -- adverse edge effects.
4 Tapering was discussed this whole last week about
5 whether or not what are beneficial to edge effects
6 and that's what I'm asking her about, her edge
7 effects testimony.

8 MS. BENSINGER: Certainly you could ask
9 her -- you asked her if she was aware of the places
10 in which CMP proposed the tapering or the -- what the
11 tapering proposal was, but she already answered that
12 she was not. And if it's not in the testimony, I
13 don't see that any further questions about that are
14 appropriate because it wasn't in her testimony and
15 she already answered she was not aware of it. She
16 wasn't here.

17 MR. MANAHAN: Okay. Thank you. Ms.
18 McMahan, let me ask you, are you aware that the Maine
19 Department of Inland Fisheries and Wildlife has
20 reviewed and commented on CMP's proposed compensation
21 plan including in relation to habitat fragmentation
22 impacts?

23 JANET MCMAHON: I am aware of that. I read
24 their testimony. And I know that their purview is
25 much narrower and forest fragmentation actually is

1 not something that IF&W or actually any state agency
2 regulates around at this point, so they're not
3 required to take into account, for instance, stream
4 catchment areas and those headwater streams that the
5 corridor crosses.

6 MR. MANAHAN: So we had heard a few
7 witnesses yesterday, I guess you weren't here, some
8 of the witnesses testified that IF&W dropped the ball
9 on the habitat fragmentation. I think dropped the
10 ball was the word. Would you agree with that?

11 JANET MCMAHON: I don't think it's in their
12 purview.

13 MR. MANAHAN: Okay. No further questions.
14 Thank you.

15 MS. MILLER: Thank you. Group 7.

16 MR. SMITH: No questions. Thank you.

17 MS. MILLER: Group 3. Okay. And we'll go
18 on to Department questions.

19 MR. BEYER: Ms. McMahon, do you -- is it
20 your opinion that this project would put the habitat
21 in the western Maine mountains beyond some tipping
22 point for either resiliency or fragmentation in terms
23 of -- in terms of the overall impact? Is it going
24 to -- is this project going to push the values or the
25 impacts beyond some tipping point from which there is

1 no return?

2 JANET MCMAHON: We don't actually know. I
3 should say scientists don't know what that tipping
4 point is. We do know that as you fragment a region
5 each fragmenting feature compromises it and reduces
6 its resiliency, so -- and this one is large enough --
7 and going east/west also is problematic, but it's
8 going to compromise its resiliency. And another
9 thing is often when you do fragment it leads to more
10 fragmentation, for instance, you know, it's a 300
11 foot corridor, I would imagine in the future they'd
12 want to put more transmission lines down that outside
13 of their project now. But usually once you introduce
14 a fragmenting feature there is more fragmentation
15 that comes in with it. So the reason this is
16 critical at this location is in the southern part of
17 the western Maine mountains, this is actually going
18 through more or less the middle of it, but as you
19 increase the fragmentation it's going to bring
20 invasive species in likely even though they're going
21 to spray every four years and might get some of them,
22 but it just provides a door to reduce the resiliency
23 at the edge and it will creep in. So it's a
24 cumulative process that happens over time, but a big
25 feature like this is going to have a major impact.

1 It's just -- it's a big feature and it's going to
2 fragment a number of forest blocks, which is not
3 addressed at all in their application. So there is a
4 lot of pieces. We can't even gauge what the overall
5 impact is from the application because it's going to
6 break so many other forest blocks into smaller ones.
7 And also going over mountainous terrains, the
8 mountain is -- the mountains are the most resilient
9 part of the state because that's where there is more
10 room for species to move up or down or to northern
11 slopes as I mentioned, so putting it through a
12 mountainous area on average elevations of 2,000 or
13 3,000 feet is problematic. And also headwater
14 streams are the most important part of a watershed in
15 terms of controlling nutrient flow, so going through
16 all those headwater streams is also problematic. So
17 I don't know what the tipping point is, but it will
18 have -- it will just, I guess, it will lower a notch
19 the overall resiliency of the region.

20 MR. BEYER: How narrow would a linear
21 feature have to be in order for it not to represent a
22 fragmentation?

23 JANET MCMAHON: You know, certainly a road
24 where the canopy closes over it would probably be
25 pretty minimal. I'd say, you know, if it were a 75

1 foot corridor. I've heard when I came into this talk
2 of looking at what it might take to put some of it or
3 all of it underground, but a 75 foot corridor is
4 still going to have those edge effects. And the edge
5 effect is when you have opening, light penetrates
6 into the adjacent forest and wind makes it warmer,
7 you end up with more early successional species or
8 invasives can move into that zone and also predators
9 move farther in and prey on birds that lay their eggs
10 on the ground and that type of thing. Those are the
11 kinds of edge effects that are documented in the
12 literature, so even if it were 75 feet, which would
13 be the width of say the Route 1 corridor in Maine
14 going from the verge to verge that obviously has edge
15 effect, so you can't really put a 75 foot or 100 foot
16 or 50 foot wide corridor through this region without
17 having permanent -- and because it's permanent you're
18 going to have edge effects. And I -- my point is the
19 application doesn't deal with the negative ones, it
20 just says the edge habitat is good habitat for early
21 successional species, which may be true for some
22 early successional species anyway, but that doesn't
23 address the edge effects into the adjacent forest.

24 MR. BEYER: Thank you. I have nothing else.

25 MR. BERGERON: Mr. Haynes, could you tell me

1 how many National Scenic Byways are in Maine? You
2 noted I think in your testimony there is about 150 in
3 the United States.

4 ROBERT HAYNES: There are four in Maine of
5 national significance and there is a number of state
6 designated byways which is a different level.

7 MR. BERGERON: Okay. Thank you.

8 Ms. McMahon, in your direct testimony you talked
9 about -- Page 10 of your direct there is a sentence
10 that says, quote, negative impact such as avian and
11 bat collisions with transmission poles and wires over
12 a new corridor of this length are likely to be
13 substantial. Do you have some other data or studies
14 that talk about avian and bat collisions with
15 transmission poles and wires?

16 JANET MCMAHON: There are some referenced in
17 this report and I can't off the top of my head tell
18 you what they are, especially avian. I mean, there
19 has been a lot of research mostly in Europe, but, you
20 know, transmission lines have similar impacts
21 wherever they are. Birds colliding. And also the
22 impacts of the electromagnetic radiation on birds,
23 which is not mentioned in their application. There
24 are impacts associated with reproductive effects tied
25 to that.

1 MR. BERGERON: Okay. And could you give me
2 a sense of the impacts of logging or forestry
3 activities on species mortality?

4 JANET MCMAHON: I -- and whenever you put in
5 a logging road or a road or a corridor you're going
6 to clear all of the vegetation and obviously there is
7 going to be a lot of mortality of whatever is in the
8 path of that infrastructure. But, again, because
9 forest operations occur at a patchy level and they
10 grow and there is this sort of shifting mosaic of
11 different age classes, I'm not -- the overall amount
12 of forest land is not decreasing so you end up with
13 enough interior habitat for species to move between
14 blocks as long as they're relatively connected. And,
15 again, this is wide enough that may keep some species
16 from moving between blocks. But the edge effects are
17 very temporary in a forest and it doesn't stay
18 cleared. You're not spraying it every four years to
19 keep it cleared.

20 MR. BERGERON: Okay. And there has been
21 some talk this morning of a tapering proposal, could
22 you give me your input in terms of if a corridor was
23 cut to a certain width, whatever it is, 75 or 150
24 feet wide, and then allowed to regrow some distance
25 on the edges what length of time it would take to get

1 from that initial cut to some sort of tapered or
2 transition or shape?

3 JANET MCMAHON: Well, I mean, a forest can
4 grow to -- saplings can grow up within a handful of
5 years to be over your head or, you know, 10, 20 feet
6 tall, but they'll stay very small diameter. But I'm
7 not familiar with the tapering proposal. I mean, I
8 do know that if you have that 15 foot wire zone you
9 still could end up with 75 feet of a cleared zone. I
10 think you would have to to keep trees from impacting
11 the sag area or whatever. I don't know exactly how
12 it works, but in looking at the vegetation
13 maintenance procedures you're still going to have a
14 very wide cleared zone. But the tapering, you're
15 still going to have an edge. I mean, you may taper
16 it, so it's, you know, I'm not sure what it looks
17 like. Again, I haven't seen their proposal, but
18 you're still going to have edge between that
19 cleared -- the part that you have to keep clear and
20 forest. It just means you have a sort of early
21 successional stage in between, so you go from
22 scrub/shrub, saplings, forest, but you still have an
23 edge. It's permanent. And I guess it's the
24 permanent part that is what sets this apart from
25 forest practices.

1 MR. BERGERON: Thank you.

2 MS. BENSINGER: Good morning, Mr. Haynes.
3 Do you have any figures -- I don't think I saw that
4 in your pre-filed testimony, any figures of the
5 number of cars using the Old Canada Road each year?

6 ROBERT HAYNES: We don't. Tourism was an
7 item which was stricken from the testimony and we do
8 have reports from the Maine Office of Tourism that
9 support scenic byway's importance to the livelihood
10 of the folks in the area, which is an existing use,
11 but I did not bring those for that particular
12 purpose.

13 MS. BENSINGER: But do you have any sense
14 off the top of your head of an estimate of the number
15 of vehicles using that road every year?

16 ROBERT HAYNES: I couldn't say within any
17 sense of credibility.

18 MS. BENSINGER: I've been on it and it's
19 beautiful and I'm trying to remember is there --
20 there was some discussion earlier this week, is there
21 a trail or path along some part of it that maybe
22 snowmobilers or hikers would be using?

23 ROBERT HAYNES: There are crossings for all
24 sorts of recreational activities whether it's ATVs,
25 snowmobiles, our most -- our biggest project to date

1 is on land owned by CMP and they've been great to
2 work with and this is a multiple use trail on the
3 Kennebec River and also the Dead River and in most
4 places it's ADA compliant. It's a hard crusher dust
5 surface. Wheelchairs can use it. It is used for a
6 snowmobile trail in the wintertime. And it was put
7 in -- it was wrapped up probably in 2006 and CMP
8 donated steel for the large bridges we put in. We
9 went through the Army Corps of Engineers permit in
10 one spot to do it and I'm very proud of that. It's a
11 great item. And we will be finishing the, oh,
12 creature comfort thing, so to speak, this year as we
13 had a significant amount of match to match the
14 federal money that went with that and that will be in
15 the form of kiosk and more interpretation and one new
16 trail head. I feel quite fortunate to have been part
17 of this process. And I'm also a member of the
18 National Scenic Byway Foundation and we are now in
19 the process of getting the program reauthorized for
20 funding. President Obama decided it was suitably
21 funded back in 2009.

22 MS. BENSINGER: So that those trails or that
23 trail run along some parts of the Old Canada Road?

24 ROBERT HAYNES: The Old Canada Road is --
25 actually in this section of the Kennebec it's on the

1 other side of the river if you want to stick to the
2 historic footprint and we actually have a lot of ties
3 to Lewiston because immigrants came from Quebec,
4 walked down and went to work in factories in
5 Lewiston. There is quite a history there. Above the
6 confluence of the Dead and Kennebec, it -- the trail
7 passes right next to the old ferryman's foundation
8 where his home was and to slide people back and forth
9 across the river so they didn't have to walk and
10 there was a few people that didn't make the crossing,
11 but that is the most tightly connected to the
12 footprint on the Old Canada Road.

13 MS. BENSINGER: But what I'm trying to get
14 at is these other uses of the scenic byway.

15 ROBERT HAYNES: Mmm Hmm.

16 MS. BENSINGER: They are parallel to it in
17 some places?

18 ROBERT HAYNES: Most cross.

19 MS. BENSINGER: They're crossings.

20 ROBERT HAYNES: Right.

21 MS. BENSINGER: All right. Thank you. I
22 have one question for Ms. McMahon. You mentioned
23 predation into the full growth area by predators
24 using the -- a transmission line, could you elaborate
25 a little bit on that with regard to what species

1 might be involved as predator and prey?

2 JANET MCMAHON: Okay. Well, when you have
3 early successional habitat or the scrub/shrub zone or
4 in that corridor, vegetation in the corridor, there
5 is a lot of species that like that habitat and they
6 like forest edges like foxes, skunks, raccoons and
7 those are the types of species that prey on ground
8 nesting birds like hermit thrushes, wood thrushes,
9 oven birds and that's a major cause of decline of
10 those species is predation where there is a lot of
11 edge, which is why they're declining more in the
12 southern part of the state partly because of cats,
13 but also those other predators that are native to the
14 north Maine woods. So those are the generalist
15 species that like edge conditions and that's what --
16 that's a major negative edge effect that you see
17 throughout the literature.

18 MS. BENSINGER: Thank you.

19 MS. MILLER: Okay. I think that concludes
20 the Department's questions. Any redirect?

21 MR. WEINGARTEN: No redirect.

22 MS. MILLER: Thank you. Okay. Thank you
23 both for your testimony this morning.

24 JANET MCMAHON: You're welcome.

25 MS. MILLER: Okay. Moving on to Group 6's

1 witnesses. I've got Mr. Hunter --

2 MR. TURNER: Dr. Hunter.

3 MS. MILLER: Dr. Hunter, sorry, Mr. Wood,
4 Mr. Cutco and Mr. Emmerson.

5 MR. TURNER: Before we begin, I just want to
6 introduce myself. Phelps Turner, Conservation Law
7 Foundation. Because Mr. Wood is a witness today, I
8 will be serving as a spokesperson for Group 6.

9 MS. MILLER: Thank you.

10 MR. TURNER: Thank you.

11 ROB WOOD: Good morning. While that gets
12 set up if you can go ahead and go to slide 4, please.

13 MS. MILLER: Can you speak more into the
14 mic, please?

15 ROB WOOD: Yes.

16 MR. TURNER: Before the witnesses begin, I
17 believe Mr. Wood was not here for the initial
18 swearing in, so we should swear him in.

19 MS. MILLER: Yes, thank you. I appreciate
20 that. So if you could stand and raise your right
21 hand, do you swear or affirm that the testimony you
22 are about to give is the whole truth and nothing but
23 the truth?

24 (Rob Wood affirmed.)

25 MS. MILLER: Thank you. And just -- if

1 everybody could just say who you are before you start
2 speaking for the transcriptionist and try your best
3 to speak right into the mic. Thank you.

4 ROB WOOD: Thank you. So good morning. My
5 name is Rob Wood. I'm the Energy Policy and Project
6 Advisor for The Nature Conservancy of Maine. The
7 Nature Conservancy is a global conservation
8 organization working in all 50 states and more than
9 70 countries and our mission is to conserve the lands
10 and waters on which all life depends. I'll be
11 summarizing the testimony of TNC staff this morning.
12 To my left are Andy Cutco and Brian Emmerson, also
13 co-authors of our testimony. So if it's all right to
14 have them briefly introduce themselves.

15 BRIAN EMMERSON: Hi. My name is Brian
16 Emmerson. I'm a Mitigation Program Manager for The
17 Nature Conservancy in Maine. I've been working on
18 wetland and natural resource permitting issues for 10
19 to 12 years and I'm a professional wetland scientist
20 as well.

21 ANDY CUTCO: Yes. Good morning. My name is
22 Andy Cutco. I'm the Director of Science for The
23 Nature Conservancy in Maine. I've been with the
24 Conservancy for about two years and prior to that I
25 worked for close to 20 years as a Forest Ecologist

1 with the Department of Agriculture Conservation and
2 Forestry in the Natural Areas Program. I have a
3 graduate degree in forest ecology and I am a licensed
4 forester in Maine.

5 ROB WOOD: Great so our pre-filed
6 testimony --

7 MR. MANAHAN: I'm sorry, could I just put a
8 standing objection like I did last time, but to the
9 extent that their exhibits have language that is not
10 in the pre-filed testimony and is in addition like
11 this language on the left side of this exhibit, to
12 the extent that's new and not in the pre-filed we
13 would have a standing objection to it. Thank you.

14 ROB WOOD: Sure. And...

15 MS. MILLER: Yup, and that objection is
16 noted and understood.

17 ROB WOOD: I would just note this text is
18 from our pre-filed testimony. I just kind of
19 combined them on one PowerPoint slide. So our
20 pre-filled testimony addresses three of the hearing
21 criteria, wildlife and fisheries alternatives
22 analysis and compensation and mitigation.

23 The Nature Conservancy science shows that
24 the forests of western and northern Maine is both
25 regionally and globally significant. Our forest

1 exhibit shows well-connect -- or sorry. I'm sorry.
2 Our first exhibit shows well-connected forests in
3 eastern North America. Landscape connectedness is a
4 measure of how easily wildlife can move from one
5 place to another and western Maine is unique in the
6 eastern United States where its concentration of
7 lands with above average to high connectivity source.

8 Next slide, please. Western Maine is also
9 resilient to the changing climate. Our second
10 exhibit shows lands in the northern Appalachian eco
11 region that are both resilient to climate change and
12 highly connected and the two concepts are
13 interrelated. Connected forests allow for greater
14 species movement over time and are responsive to
15 climate change and western Maine will serves as a key
16 wildlife linkage in the northern Appalachian region
17 as the climate changes.

18 Next slide, please. Data from the State of
19 Maine also shows the regional significance of the
20 specific area where Segment 1 of NECEC would traverse
21 and the state has identified this block as larger
22 than 500,000 acres making it one of the largest
23 unfragmented corridor -- forest blocks in the region.

24 Let's skip to slide 9. This is perfect. So
25 this is an animated version of our Exhibits 4 and 5.

1 We also have the just normal Exhibits 4 and 5, but
2 this shows that at a global scale western Maine also
3 serves as a corner of one of the world's last
4 remaining contiguous temperate broadly mixed forests.
5 So our Exhibits 4 and 5 show the historical extent of
6 temperate broadly mixed forests globally and the
7 current extent.

8 If we could move to slide 11, please. And
9 some of this has also been provided as exhibits by
10 other witnesses and other groups, so please excuse
11 any redundancy. We also note that western Maine
12 supports exceptional biodiversity providing habitat
13 for approximately 140 rare species and nesting
14 habitat for more than 30 woodland and song bird
15 species. This exhibit -- our 6th exhibit also shows
16 that western Maine -- the western Maine mountains are
17 globally significant as a bird area according to the
18 National Audubon Society.

19 So in short, The Nature Conservancy is
20 concerned about the potential NECEC Segment 1 to
21 contribute to new an unprecedented habitat
22 fragmentation of this globally and regionally
23 important well-connected and resilient landscape.
24 Habitat fragmentation is a particular concern for
25 species that require mature closed canopy forest

1 cover as noted by others this week. Ultimately, we
2 believe that habitat fragmentation has not been
3 adequately addressed in the Applicant's compensation
4 and mitigation plan.

5 So I'll touch briefly on the alternatives
6 analysis. We note in our pre-filed testimony that
7 the Applicant makes a reasonable case that among the
8 three action alternatives presented that NECEC would
9 be the least damaging and they do take into
10 consideration habitat fragmentation. However, we
11 believe it would be reasonable for the Department to
12 request a Segment 1 line burial alternative
13 especially because the alternatives analysis does
14 contain an underground transmission alternative
15 specific to the Kennebec Gorge, so we think that
16 would be expanded to the entirety of Segment 1.
17 Understanding the practicability of underground
18 transmission in Segment 1 could be useful especially
19 given the other proposed corridors in northern New
20 England that propose burying significant portions of
21 the line.

22 So moving to compensation and mitigation.
23 Our last subject area covered by our pre-filed
24 testimony starting with cold water fisheries, we
25 agree that replacing undersized culverts with Stream

1 Smart culverts can approve aquatic habitat
2 connectivity. However, we note that the \$200,000 in
3 compensation that has been proposed would be
4 insufficient to replace the 20 to 35 culverts the
5 Applicant intends to replace. Regarding compensation
6 and mitigation for wildlife habitat impacts, the
7 Applicant states in its revised compensation plan
8 that the plan achieves no net loss of ecological
9 functions and values. We believe that this cannot be
10 the case unless additional steps are taken to
11 mitigate habitat fragmentation. The Applicant's
12 revised compensation plan takes initial steps to
13 mitigate habitat fragmentation, for example, by
14 proposing to establish deer travel corridors in the
15 Segment 1 deer wintering area, proposing to raise
16 pole heights to allow for full height canopy and
17 Roaring Brook Mayfly and Northern Spring Salamander
18 habitat and proposing to taper vegetation in the
19 corridor that is in the viewshed of Coburn Mountain.
20 However, these strategies apply only to a small
21 portion with the 53.5 mile Segment 1 corridor. We
22 recommend that the Department consider requiring
23 additional steps to mitigate habitat fragmentation in
24 Segment 1 to the maximum extent practicable.

25 We can move to slide 19, please. So we

1 suggest four techniques to minimize habitat
2 fragmentation. So first, narrow the width of the
3 clear -- or narrow the cleared width of the corridor
4 to the --

5 MR. MANAHAN: I would object to this. It
6 appears to be an entirely new exhibit, which we
7 haven't seen. It's not in the pre-filed testimony.

8 ROB WOOD: Could I just respond?

9 MS. MILLER: Respond.

10 MR. TURNER: May I respond? Sorry. Just
11 one second.

12 ROB WOOD: Sure.

13 MR. TURNER: This is a summary of what's
14 been submitted in the pre-filed testimony.

15 MR. MANAHAN: Well, can I just say it's not
16 clear unless I review it and compare it to the
17 pre-filed testimony and the instructions were clear
18 that we can't have new exhibits.

19 MS. BENSINGER: Excuse me, sir, you need to
20 identify yourself for the transcriptionist.

21 MR. TURNER: Sure. I already did, but I
22 will do it again. Phelps Turner, Conservation Law
23 Foundation. We are a member of Group 6. I'll be the
24 spokesperson today because Mr. Wood is serving as a
25 witness.

1 MS. BENSINGER: Okay. If the spokesperson
2 could respond to the objection. Say that again,
3 please. You're saying --

4 MR. TURNER: I did, but I will --

5 MR. BENSINGER: You're saying it's a summary
6 of his testimony?

7 MR. TURNER: Yes, that's what I said. It's
8 a summary of -- of what's been presented in the
9 pre-filed testimony.

10 MS. BENSINGER: It would be better if you
11 just gave it orally because we can't have new
12 exhibits.

13 ROB WOOD: Understood. So we can take that
14 down, please. So we suggest --

15 MS. MILLER: Do not look at that.

16 ROB WOOD: Sure. And that's also butchering
17 the best practices for PowerPoint presentations. So
18 we suggest four techniques to minimize habitat
19 fragmentation; number one, narrow the cleared width
20 of the corridor by burying additional sections of the
21 line; number 2, narrow the cleared widths of the
22 corridor by tapering vegetation within the corridor,
23 we present the Bingham Wind Project as an example
24 where the Department required in places the use of
25 v-shaped management, so tapering in other words;

1 requiring additional wildlife travel corridors
2 similar to what has been proposed in the Segment 1
3 deer wintering area and we also know that, you know,
4 that could be confined with tapering; and number
5 four, requiring co-location of the line with the
6 Spencer Road to minimize habitat fragmentation.

7 We do have one more exhibit actually. I'm
8 so sorry, if -- if you already took it down, that's
9 okay. We can look at it potentially later and it's
10 in our pre-filed testimony for folks who are looking
11 at it it's Exhibit 7, which is priority areas for
12 habitat connectivity identified by our staff.

13 MS. BENSINGER: We have it here.

14 ROB WOOD: Okay. Great. So we'll note that
15 the entirety of Segment 1 is a priority for habitat
16 connectivity, but we did take the additional step of
17 narrowing in on the areas that we see as most
18 important from a habitat connectivity perspective.

19 And then finally, in our pre-filed testimony
20 we note that for habitat fragmentation that cannot be
21 avoided and minimized to recommend compensating by
22 reducing or preventing fragmentation elsewhere in the
23 affected region through land conservation and that
24 would be either preservation or acquisition of
25 conservation easements on land. So we -- we do note

1 that if you apply kind of standard multipliers to the
2 acreage that is affected or would be affected by the
3 proposed corridor that you could arrive at a number
4 of around 40 to 100,000 acres in terms of
5 compensation for habitat fragmentation without any
6 additional avoidance or minimization.

7 So that's all. Thank you so much for the
8 opportunity to provide input.

9 MS. MILLER: Thank you.

10 MALCOM HUNTER: Good morning. My name is
11 Malcom Hunter. I'm a Professor at the University of
12 Maine in the Department Wildlife Ecology and
13 Conservation Biology. And I have written a number of
14 papers and three books on the topics at hand. I'm
15 used to speaking in 50 minute chunks, so to control
16 myself I'm going to read my testimony, something I
17 virtually never do. That will -- that will also keep
18 me from waxing personal and telling you about skiing
19 down Coburn Mountain or swimming the length of the
20 Kennebec Gorge.

21 Anyway, so here we go. Habitat
22 fragmentation is wildly recognized as one of the
23 leading causes of biodiversity decline across the
24 globe and thus a key concern here is the differences
25 between the fragmentation generated by working

1 forests and the transmission corridor. There are
2 three basic ones; the proposed corridor would be
3 essentially permanent, whereas most of the openings
4 created by forestry are patchwork that shifts over
5 time; two, the corridor would be significantly wider
6 than typical logging roads, 150 feet versus 20 to 40
7 feet; and third, it would be a linear fragmenting
8 feature creating far more edge than forestry cuts of
9 similar acreage. This is simple geometry. A circle
10 has the -- is the shape of the least edge and as you
11 divert from a circle you get more and more edge per
12 unit area. I'll come back to the edge effects later.

13 It's important to note that the
14 fragmentation effects of the forest management in
15 this region are quite light handed compared to some
16 other forests like the industrial plantations of the
17 southeastern United States or even parts of New
18 Brunswick. Just a few weeks ago, I flew from
19 Amsterdam to Boston and I was really struck by the
20 difference between northern New Brunswick and
21 northern Maine in terms of the intensity of our
22 forest management.

23 So what does fragmentation of this nature
24 mean for wildlife? This very much depends on the
25 species. Every species is different and we are

1 talking about hundreds of species of vertebrae
2 animals, thousands of species if we include
3 invertebrates and plants. On one end of the
4 continuum for wide ranging species like coyotes long
5 linear openings are likely to be pathways actually
6 facilitating their movements across the landscape.
7 On the other hand, for a pine marten or a red-backed
8 salamander a power line would be a significant filter
9 to their movement, not an absolute barrier but
10 something that greatly reduces the possibility of --
11 or probability of their passage of crossing. Even
12 the situation of individual animals can affect this
13 filter effect. For example, we undertook a study of
14 road crossing by amphibians and we found that a
15 juvenile frog disbursing away from its natal pool
16 where it was born is more likely to cross a road than
17 an adult amphibian moving around its home range, so
18 it's all very much dependent on exactly what you're
19 talking about.

20 Other ecological impacts of the corridor
21 would include just the immediate loss of roughly
22 1,000 acres of -- of vegetation. This will be a
23 particularly large impact for a species with small
24 home ranges, back to the red-backed salamander, and I
25 want to remind you most species have small home

1 ranges. We focus on the big ones, the white-tailed
2 deer and bears that have large home ranges and most
3 species have small home ranges and 1,000 acres is
4 significant to them. Introduction of invasive plant
5 species is a significant issue. Large forest blocks
6 resisting invasive species whereas disturbed areas,
7 especially disturbed soil, invite them and once that
8 foothold is established control of invasive plants is
9 extremely difficult.

10 Edge effects, we've heard a little bit about
11 this this morning, but at the risk of repeating these
12 are caused primarily by changes in light and wind
13 exposure that can profoundly alter the plant
14 communities composition and structure, particularly
15 when that's linked to the invasion of exotic species
16 and ultimately that means an altered habitat for
17 wildlife. As a broad generalization, forest edge is
18 more favorable to widespread species that tend to be
19 of less conservation concerns, raccoons and foxes and
20 such and worse for specialized forest interior
21 species like American marten and many song birds.
22 One global review found forest interior species reach
23 peak performance over 200 to 400 meters from the
24 nearest edge of, you know, 700 to 1,300 feet. So
25 Segment 1 would create 107 miles of new forest edge

1 and even thinking in terms of an edge effect of just
2 330 feet that means 5,000 acres of the interior
3 forest that would be directly or indirectly impacted.
4 And with some edge effects occurring in excess of
5 1,000 feet, we're talking about in excess of 15,000
6 acres of impacted forest.

7 I want to wrap up with a bit of a long-term
8 perspective. Many fragmentation effects are not
9 immediate. They may take decades to play out as
10 populations have less habitat and are impeded from
11 movement across the landscape. Second, impacts from
12 a power line would be cumulative and additive to
13 existing features, mainly the major logging roads in
14 the region, but we're not just talking about another
15 straw added to the camel's back. This feature would
16 be a big log put onto the camel's back.
17 Fragmentation likely increases the vulnerability of
18 Maine's native plants and animals through climate
19 change because ultimately it's the movement of
20 individuals across the range leading to the movement
21 of populations that is the main way that species
22 adapt over time to climate might change.

23 So in summary, I -- I do not believe the
24 proposed mitigation compensation plan as I understand
25 it currently adequately addresses the cumulative

1 impact to the full array of Maine wildlife. Thank
2 you.

3 MS. MILLER: Thank you. Cross.

4 MS. GILBREATH: Morning, everyone. My name
5 is Lisa Gilbreath. I'm here on behalf of CMP.
6 Mr. Wood, I guess, I'll address these to you and your
7 panel. I don't care who responds. But in your TNC
8 testimony you state that sustainable forestry does
9 not fragment large forest blocks in the same manner
10 as a wide linear corridor; is that correct?

11 ROB WOOD: That's correct.

12 MS. GILBREATH: And I've heard both you and
13 Dr. Hunter mention approximately 100 miles of new
14 habitat edge that you estimate would be created by
15 this corridor?

16 ROB WOOD: Correct.

17 MS. GILBREATH: Have you read the Maine
18 Forest Service statistics for timber harvest in
19 Franklin and Somerset counties that Mr. Goodwin cites
20 in his rebuttal testimony?

21 ANDY CUTCO: Yes, again, this is Andy Cutco
22 and I am familiar with those statistics.

23 MS. GILBREATH: So do you agree that for the
24 period 2015 to 2017 those statistics show a total of
25 27,368 acres of forests for clearcut?

1 ANDY CUTCO: I'm confident in the statistics
2 from the Maine Forest Service, yes. I would like to
3 also comment on the definition of a clearcut. I
4 think we've heard a lot of discussion this week about
5 clearcuts and their comparison and contrast to what a
6 power line clearing might look like. The definition
7 of -- according to the definition of a clearcut a
8 forest could actually retain as much as 30 square
9 feet of basal area of forest within a clearcut, which
10 if you think about 4 or 5 and 6 or 7 inch trees might
11 be as many as 40 to 50 trees per acre. So even in a
12 silvicultural clearcut as defined by the Maine Forest
13 Service, I think the residual forest looks quite a
14 bit different than what a cleared power line corridor
15 would look like.

16 MS. GILBREATH: So how would you define a
17 say 30 acre parcel that's been completely leveled to
18 the ground?

19 ANDY CUTCO: That would certainly qualify as
20 a clearcut, however a couple things. First, only I
21 think 6 to 7 percent of Maine's harvest are clearcuts
22 and most of the clearcuts that I'm familiar with, and
23 I've spent a lot of time with the land managers in
24 this region, most of the clearcuts that I'm familiar
25 with do actually retain some structure, certainly

1 more than a cleared utilities corridor.

2 MS. GILBREATH: So is it your testimony that
3 the Maine Forest Service statistics showing 27,368
4 acres of forest clearcut is inaccurate?

5 MR. TURNER: Objection. If Ms. Gilbreath is
6 going to cross-examine this witness on those
7 statistics, I'd like to make sure that he has them in
8 front of them so he can consult them.

9 MS. GILBREATH: Subject to check. They're
10 in the rebuttal testimony.

11 ANDY CUTCO: As I mentioned, I don't quite
12 --

13 MS. MILLER: Hold on. Hold on.

14 MR. TURNER: Sorry, I don't think the
15 objection is ruled on yet.

16 MS. MILLER: Can you just -- I am sorry to
17 ask you to keep identifying yourself every time you
18 speak, but --

19 MR. TURNER: Phelps --

20 MS. MILLER: -- you're new here, so.

21 MR. TURNER: Phelps Turner, Conservation Law
22 Foundation. I'll be the spokesperson for Group 6
23 today because Mr. Wood is serving as a witness.

24 MS. MILLER: I would just -- just when you
25 speak just say Phelps Turner that would just be very

1 helpful and I know that's really annoying, but where
2 there is a lot of people here and it's really hard
3 for the transcriptionist to keep up.

4 MR. TURNER: Understood.

5 MS. MILLER Thank you.

6 MR. TURNER: This is Phelps Turner, I have
7 an objection to the form of the last question.

8 MS. BENSINGER: Does the witness wish to see
9 the testimony that she's referring to because it can
10 be provided to you.

11 ANDY CUTCO: If this is Mr. Goodwin's
12 rebuttal testimony, I am familiar with it, yes.

13 MS. MILLER: Okay. Proceed then.

14 ANDY CUTCO: I -- as I mentioned, I don't
15 question the Maine Forest statistics --

16 MS. BENSINGER: Just -- is that microphone
17 on?

18 ANDY CUTCO: Yes, it is. I'm sorry. As I
19 mentioned, I don't question the Maine Forest Service
20 statistics on clearcutting. What I wanted to do is
21 provide both a definition -- a regulatory definition
22 and also essentially what might be a visual
23 description of what a clearcut looks like. And a
24 clearcut I think can, in fact, look like an area that
25 is cleared of all trees greater than maybe 2 or 3

1 inches in diameter but is not by definition a cleared
2 stand of all trees and saplings. It can have as much
3 as 30 square feet of basal area or roughly 30 to 40
4 trees that are 4 or 5 and 6 inches tall can still be
5 defined as a clearcut, so there is a lot of variety
6 within what the clearcut looks like on the ground and
7 they don't all look like a cleared power line
8 corridor, that's my point.

9 MS. GILBREATH: Do clearcuts have an edge
10 effect?

11 ANDY CUTCO: It depends on the intensity of
12 the clearcut and I would say they probably do have an
13 edge effect, but as many others have described it's a
14 much shorter lived effect than a permanent corridor.

15 MS. GILBREATH: How long does it take a
16 clearcut area to regenerate?

17 ANDY CUTCO: As I --

18 MS. GILBREATH: To full forest canopy.

19 ANDY CUTCO: As I mentioned, most clearcuts
20 have some retained regeneration within them, so
21 they'll already have trees that are 20 to 30 feet
22 tall. In terms of sap- -- or a seedling, let's say,
23 that are 2 or 3 feet tall, it may take -- to get to
24 25 feet tall it may take 25 years.

25 MS. GILBREATH: Are you aware that the

1 entire border between the United States and Canada is
2 cleared and mowed?

3 ANDY CUTCO: I am.

4 MS. GILBREATH: Would you describe that area
5 as an impediment to the movement of animals?

6 ANDY CUTCO: I would. And I would defer to
7 Dr. Hunter if he wanted to elaborate on -- on that.
8 As I think you heard from his testimony there is --
9 there is a lot of gray in this. I think there has
10 been an attempt this week to simplify matters and
11 categorize things in a lot of black and white, so I
12 am sure it's a barrier to some species and not others
13 just like a utility corridor would be.

14 MS. GILBREATH: Dr. Wood, would you like to
15 add?

16 MALCOM HUNTER: Hunter.

17 MS. GILBREATH: Oh, I'm sorry. Mr. Wood,
18 Dr. Hunter.

19 MALCOM HUNTER: Yeah. No, I didn't think I
20 have much more to add to that except that, yes, I
21 don't know that the border is actually mowed, the
22 parts I've walked, but -- but you're right, it's
23 wide, it's a wide clearing and -- and, again, it --
24 whether or not it represents a fragmenting feature
25 depends very much on the species you're talking

1 about.

2 MS. GILBREATH: Now, back to TNC, you
3 discussed in your presentation and in a few places in
4 your testimony the concept of tapering; am I correct?

5 ROB WOOD: Correct.

6 MS. GILBREATH: Have you read the
7 compensation and mitigation plan that CMP submitted
8 into the record in January of this year?

9 ROB WOOD: Yes, I have.

10 MS. GILBREATH: Are you familiar with
11 Exhibits 10-1 and 10-2 of the Site Law Application
12 that were revised and submitted with that
13 compensation plan in January 2019?

14 ROB WOOD: Yes, I have -- I have not read it
15 in the past couple of days, but I have read it.

16 MS. GILBREATH: Well, let me remind you that
17 those are the construction vegetation clearing plan
18 and the post-construction vegetation management plan,
19 does that ring a bell?

20 ROB WOOD: Yes.

21 MS. GILBREATH: And within those plans CMP
22 has a proposal for what we've been referring to as
23 tapering here; is that correct?

24 ROB WOOD: Yes, that's correct. I would say
25 that the -- I did not see any diagrams in those

1 exhibits. I believe there is a diagram of what
2 tapering would look like in the Coburn Mountain
3 viewshed in other materials, but we have not seen a
4 diagram in those exhibits.

5 MS. GILBREATH: Are you aware that within
6 those management plans CMP describes that where
7 possible as part of its tapering plan there will be
8 no clearing from edge to edge and instead there will
9 be selective vegetation management to achieve the
10 tapered effect?

11 ROB WOOD: Could you clarify if you're
12 speaking about which -- which portions of the
13 corridor you're referring to?

14 MS. GILBREATH: Where tapering has been
15 proposed.

16 ROB WOOD: And could you elaborate on those
17 specific areas?

18 MS. GILBREATH: Not off the top of my head.
19 But within the vegetation plans that are in 10-1 and
20 10-2.

21 ROB WOOD: So our understanding is that
22 based on application materials and conversations that
23 tapering could be achieved by allowing existing
24 stands to remain in place and so it could be done
25 without clearing initially and I think we would argue

1 that that is -- that would be highly preferable to --
2 to clearing initially and so if that is the point
3 you're driving toward I think, yes, leaving trees up
4 to 35 feet high down to 15 feet high in the middle of
5 the corridor without clearing those trees initially
6 they could be retained that could be helpful, but I
7 would defer to my colleagues in terms of to the
8 extent that's helpful.

9 MS. GILBREATH: Thank you, Mr. Wood, that is
10 the point I was driving at and I just wanted the
11 record to be clear that that is part of our tapering
12 plan.

13 ROB WOOD: And I would just note --

14 MS. GILBREATH: And you understand it.

15 ROB WOOD: And I would just note that I --
16 my understanding to that is proposed primarily for
17 the Coburn Mountain viewshed and which is a 3 mile
18 portion of the 53.5 mile Segment 1 corridor and so a
19 small portion of Segment 1.

20 MS. GILBREATH: Now, anyone from TNC, do you
21 agree that utility corridors can minimize hard edge
22 impact on fragmentation by applying soft edge
23 management techniques such as integrated vegetation
24 management and maintaining what I'll refer to as
25 vegetation bridges for wildlife movement?

1 ANDY CUTCO: Yes, I think we are familiar
2 with the fact that vegetation management can enhance
3 habitat in the context of a much more developed and
4 disturbed environment. Southern Maine, southern New
5 England. If I -- I lived in southern Maine and I
6 have a power line near my house and there is
7 definitely wildlife that use it, however, most of
8 those wildlife species are a number of those that
9 have been described earlier today as generalists, the
10 foxes, the raccoons, the blue jays, et cetera, many
11 of which are actually predators.

12 MS. GILBREATH: And Mr. Emmerson, do you
13 think the Maine Department of Inland Fisheries and
14 Wildlife has expertise in the management of wildlife
15 in Maine? I'm sorry, Mr. Cutco. I confuse the two
16 of you.

17 ANDY CUTCO: Yes, I do. We've worked a
18 lot -- I've worked a lot with IF&W in the past and
19 The Nature Conservancy has a number of ongoing
20 projects with IF&W, so, yes, we do.

21 MS. GILBREATH: And does IF&W have that same
22 expertise in habitat fragmentation?

23 ANDY CUTCO: That's a good question. I --
24 I -- understanding their regulatory purview, I am not
25 sure that they spend a lot of time focusing on large

1 scale habitat fragmentation of the scale of this
2 project, so that's an open question. There are some
3 certainly dedicated and bright people who I'm sure
4 thought about it at IF&W.

5 MS. GILBREATH: Do you believe that IF&W has
6 expertise in ensuring adequate mitigation strategies
7 to protect wildlife and fisheries habitat?

8 ANDY CUTCO: I believe IF&W has a valid
9 perspective on the topic, absolutely.

10 MS. GILBREATH: And are you aware that CMP
11 has consulted extensively with IF&W on travel
12 corridors and riparian buffers?

13 ANDY CUTCO: I am. My -- I guess my
14 understanding of this proceeding is that your aim is
15 to collect I believe the term is all relevant
16 evidence regarding perspectives on habitat
17 fragmentation and impacts and so I feel as though our
18 perspective, certainly that of Dr. Hunter, is -- is
19 valid as well.

20 MS. GILBREATH: On Page 8 of TNC's
21 testimony, TNC requests that CMP consider IF&W's
22 recommendation to maintain a 100 foot riparian buffer
23 on all streams within the project area. I believe it
24 is the second to last full paragraph beginning with
25 the Conservancy also appreciates the Applicant's

1 proposal.

2 ROB WOOD: Sorry, could you repeat -- is the
3 question do you see that?

4 MS. GILBREATH: Do you see that?

5 ROB WOOD: Yes.

6 MS. GILBREATH: Okay. Are you aware that
7 CMP modified its proposal in January 2019 in that
8 submission that we spoke of earlier by expanding its
9 proposed buffer to 100 feet for cold water fisheries
10 habitat?

11 ROB WOOD: Yes.

12 MS. GILBREATH: Okay. And that CMP also
13 proposes for all other streams a 75 foot buffer
14 expanded from its previous proposal of 25 feet?

15 ROB WOOD: Yes.

16 MS. GILBREATH: Quickly, Dr. Wood, you
17 mentioned in your --

18 ROB WOOD: Dr. Hunter or?

19 MS. GILBREATH: Mr. Wood. You need to get a
20 PhD, Mr. Wood.

21 MALCOM HUNTER: He deserves the PhD after
22 this after his name as well.

23 MS. GILBREATH: Oh, of course, which is a
24 doctorate. You noted, Mr. Wood, in your summary
25 testimony morning that TNC would benefit from

1 understanding the practicability of undergrounding
2 the project; is that correct?

3 ROB WOOD: So I -- I think the way we
4 phrased it as -- is as the state could benefit from
5 understanding the practicability.

6 MS. GILBREATH: Are you aware that CMP
7 submitted extensive rebuttal testimony on just that
8 proposal?

9 ROB WOOD: Yes. Yes, I am and I also
10 understand there will be another hearing day in May
11 specific -- specifically on that topic.

12 MS. GILBREATH: Thank you. I have no
13 further questions.

14 MS. MILLER: Thank you. Group 4.

15 MR. PUBLICOVER: All right. Dave Publicover
16 from the Appalachian Mountain Club for Group 4. And
17 I'm going to want to bring TMC's exhibits back up on
18 the screen that we had earlier. All right. I'd like
19 to -- I'd like to start with Dr. Hunter.

20 MS. MILLER: Hold on a second. We talked
21 about some of those.

22 MR. PUBLICOVER: I believe this is one that
23 was not objected to.

24 MS. MILLER: Okay.

25 MR. PUBLICOVER: And I'm only going to refer

1 to one.

2 MS. MILLER: Okay. Thank you.

3 MR. MANAHAN: All right. Just to clarify, I
4 believe we objected to all of them if they didn't --
5 so if they didn't -- if the information or if the
6 slide itself was not in the pre-filed testimony, so
7 just --

8 MR. PUBLICOVER: I -- I can get the same
9 thing from my exhibit if you'd rather I pull that one
10 up.

11 MS. MILLER: Let's just pull up the actual
12 exhibit from the actual testimony, which I believe we
13 have on there, do we not?

14 ROB WOOD: Could I just respond as well just
15 to save --

16 MS. MILLER: Yes.

17 ROB WOOD: In terms of, you know, the --
18 what my understanding was for the summary testimony,
19 I don't think that there was an explicit instruction
20 that we couldn't have PowerPoint slides that had text
21 on them with our exhibit.

22 MS. BENSINGER: The PowerPoint slides, and
23 maybe we could have been clearer, are just supposed
24 to be of the -- it's just supposed to have exhibits
25 that were actually submitted and not recombinations

1 of things, but the exhibit that Mr. Publicover is
2 going to use is just a regular exhibit that was
3 submitted...

4 MR. PUBLICOVER: And it's a -- it's
5 essentially identical to an exhibit that I submitted
6 to you and if you'd rather I pull up --

7 MS. BENSINGER: Great. Let's use that one.

8 MR. TURNER: May I also interject, please.

9 MS. MILLER: Yes.

10 MR. TURNER: Phelps Turner, spokesperson for
11 Group 6. I just want to add I don't believe it was
12 Mr. Wood's intention to enter any of the PowerPoint
13 into the record. We were using the slides as
14 illustrative demonstratives, so.

15 MS. MILLER: Yup. And we allowed them as
16 such.

17 MR. TURNER: Thank you.

18 MR. PUBLICOVER: All right. Are we good to
19 go?

20 MS. MILLER: Yes. Thank you.

21 MR. PUBLICOVER: Dr. Hunter, I think you
22 maybe sold yourself a little short on your
23 qualifications. You've been a Professor at
24 University of Maine for 40 years.

25 MALCOM HUNTER: (Witness indicating yes.)

1 MR. PUBLICOVER: You've been researching
2 biodiversity in both Maine and globally for that
3 time?

4 MALCOM HUNTER: (Witness indicating yes.)

5 MR. PUBLICOVER: You've authored or edited
6 three books on the subject and numerous peer review
7 publications.

8 MALCOM HUNTER: (Witness indicating yes.)

9 MR. PUBLICOVER: You are --

10 THE REPORTER: Excuse me, he has to answer
11 out loud for the record and not nod. Please
12 verbalize your answers.

13 MALCOM HUNTER: Oh, sorry, yes. I was
14 waiting for the end.

15 THE REPORTER: Thank you.

16 MR. PUBLICOVER: And you were past President
17 of the Society for Conservation Biology, correct?

18 MALCOM HUNTER: Yes.

19 MR. PUBLICOVER: All right. Now, several
20 witnesses that we've heard extensive testimony about
21 the significance of the western Maine mountains as
22 part of a nationally and even globally significant
23 region. Could you explain how this region could be
24 considered so significant given that much of it is
25 managed commercial timberland?

1 MALCOM HUNTER: Well, I think there are two
2 considerations there. First of all, the -- when you
3 hear managed timberlands there is a range of
4 situations that that covers. And as I alluded to
5 earlier compared to much of the forest plantations of
6 the southeastern United States or even New Brunswick
7 and much of southern Quebec our lands are much more
8 widely managed than those situations where you have
9 rows of spruces planted and so forth. So there --
10 there is -- that's part of the story. And the other
11 the extent to which we are connected as a number of
12 maps have shown the -- because we are sitting on the
13 spine of the Appalachians there is connectivity to
14 forested regions through the Adirondacks and beyond
15 and up into the Maritime Provinces, the Gatsby, et
16 cetera, so all of these things combine to make this
17 as you alluded and that this map depicts is a
18 globally significant place.

19 MR. PUBLICOVER: All right. In terms of
20 connectivity, you know, we've heard that this region
21 is permeated by logging roads. How do logging roads
22 impact connectivity as compared to the new corridor?

23 MALCOM HUNTER: Well, they have an impact
24 certainly and particularly a permanent road like the
25 Spencer Road would have an impact, but significantly

1 less just simply if for no other reason than the --
2 than the width of the road is going to represent a
3 fragmented feature for fewer species. Again, I
4 always come back to the -- there is a whole suite of
5 species out there and every one of them looks at the
6 world a little differently, but they're going to be
7 far fewer species that see a forest road as a
8 fragmenting feature than a 150 feet wide corridor
9 associated with the power line that's proposed.

10 MR. PUBLICOVER: Sometimes the term habitat
11 permeability is used, could you describe what that
12 means?

13 MALCOM HUNTER: Well, just, again, species
14 by species the extent to which a particular --
15 typically we're talking about vegetation types and to
16 what extent they are willing to move into and through
17 a particular type of vegetation would constitute its
18 permeability.

19 MR. PUBLICOVER: And why should we care if
20 salamanders can get from one side of corridor to the
21 other?

22 MALCOM HUNT: Do you want me to whack
23 philosophical about the value of salamanders?

24 MR. PUBLICOVER: No, I want you to whack
25 ecological about consequences of separating

1 salamanders on one side from the other.

2 MALCOM HUNTER: Okay. Well, it's not just a
3 matter of losing cultural bonds or the -- the
4 population connectivity is -- sorry, this gets into
5 some fairly arcane stuff about metapopulations and
6 things, but to try and keep it simple the populations
7 need to be connected. They're -- the populations are
8 divided into small subpopulations that are forever in
9 danger of this disappearing and needing new genetic
10 input and there is -- a population that is isolated
11 is in danger of going extinct and staying extinct if
12 it is not connected. The connectivity whether it's
13 about population shifting the geographic range in
14 response to climate change or avoiding genetic
15 inbreeding or avoiding a shortage of males or females
16 in a given population, there is a host of reasons why
17 populations need to be connected and fragmentation
18 works directly against that.

19 MR. PUBLICOVER: All right. Ms. Gilbreath
20 brought up the point that there is it a cleared swath
21 along the border and you said you've been in that
22 swath. If I told you that swath was about 30 to 35
23 feet wide, would that be consistent --

24 MALCOM HUNTER: That's consistent with my
25 memory, yes.

1 MR. PUBLICOVER: Okay. All right. Some of
2 these questions you already addressed during your
3 summary. All right. In your opinion, would the
4 early successional habitat that would be permanently
5 maintained in the new corridor result in an overall
6 improvement to habitat quality in the region?

7 MALCOM HUNTER: No.

8 MR. PUBLICOVER: All right. In his
9 pre-filed testimony CMP witness Mr. Mirabile states
10 that the project will not disrupt or interfere with
11 wildlife life cycles, do you agree with this
12 conclusion?

13 MALCOM HUNTER: Definitely not.

14 MR. PUBLICOVER: All right. And I think
15 we've addressed this, the Applicant contends that the
16 fragmenting impacts of the corridor are no different
17 than the fragmentation created by the existing
18 pattern of timber management in the region, do you
19 agree with that conclusion?

20 MALCOM HUNTER: No.

21 MR. PUBLICOVER: That's all for now. I may
22 think of another one and come back, but now I'd like
23 to move onto Mr. Cutco. I just want to make sure
24 that people understand this exhibit which both you
25 presented and I adopted as well. So the top slide

1 that the -- the green area represents the mixed
2 temperate or the temperate mixed hardwood or
3 temperate and mixed hardwood and mixed forest biome,
4 correct?

5 ANDY CUTCO: Yes.

6 MR. PUBLICOVER: And could you describe what
7 that is?

8 ANDY CUTCO: It's a certain forest type that
9 has characteristic species and a map of all -- as it
10 indicates a map of all extents across the globe. So
11 it would be different than, for instance, the boreal
12 forest or the tropical forest.

13 MR. PUBLICOVER: All right. And in the
14 bottom slide the green represents the remaining large
15 forest blocks within this biome, correct?

16 ANDY CUTCO: Yes.

17 MR. PUBLICOVER: All right. And do you know
18 what the map -- what they considered large was?

19 ANDY CUTCO: Thousands of acres typically.
20 So as you can see here, obviously we had some
21 discussion about scale earlier in the day and clearly
22 areas of even hundreds of acres wouldn't show up at a
23 scale of this map, so I don't know the exact number,
24 but it's thousands of acres.

25 MR. PUBLICOVER: All right. And within the

1 red line that represents our region, that's not a
2 single forest block, is it, it's multiple forest
3 blocks? I mean, if you zoomed in on this map would
4 you see a separation created by Route 201?

5 ANDY CUTCO: Obviously it depends how you
6 defined forest blocks, but, yes, you would likely see
7 a separation by Route 201. Probably 201, probably
8 27, Route 6 and some of the traveled roads in the
9 area, yes.

10 MR. PUBLICOVER: Okay. So they haven't been
11 ignored in this analysis?

12 ANDY CUTCO: Correct.

13 MR. PUBLICOVER: Okay. In terms of the
14 difference between the top and the bottom, what
15 happened to all that green in the top slide?

16 ANDY CUTCO: Well, it's largely clearing of
17 forest and development over the last several
18 centuries. As you can imagine, there has been
19 significant change in the landscape of the globe and
20 that change is manifested in these maps.

21 MR. PUBLICOVER: Okay. And would it be fair
22 to say that this biome lies where some of the most
23 intensively settled portions of the globe are of the
24 eastern United States, Europe, China, Japan?

25 ANDY CUTCO: Yes, I think that's a fair

1 statement.

2 MR. PUBLICOVER: Okay. Now, we've heard a
3 lot about The Nature Conservancy's resilient and
4 connective landscapes analysis and how do you
5 define -- how did TNC define resilience?

6 ANDY CUTCO: In the context of ecological
7 resilience it's defined as the capacity of a site to
8 maintain species diversity and ecological function in
9 a changing climate.

10 MR. PUBLICOVER: Okay. In the interest of
11 time, I'm not going to ask you to go into details,
12 but who was involved in developing that analysis?

13 ANDY CUTCO: The key architect of it was Dr.
14 Mark Anderson who has been with the Conservancy for
15 more than 20 years and he had input from Conservancy
16 scientists and others all across the country.

17 MR. PUBLICOVER: All right. And has that
18 analysis been peer reviewed?

19 ANDY CUTCO: The underlying concepts were
20 published in the Journal of Conservation Biology in
21 2014, I believe.

22 MR. PUBLICOVER: Okay. Thank you. And as
23 we've seen in both your exhibits and my exhibits,
24 this region rates very highly in terms of climate
25 change resilience. In Mr. Manahan's cross of

1 Ms. McMahon when he had the slide up showing
2 resilient lands he asked where the highways were, do
3 you recall that?

4 ANDY CUTCO: Yes, I guess.

5 MR. PUBLICOVER: Okay. Are roads and
6 highways considered in that analysis?

7 ANDY CUTCO: Yes, they are.

8 MR. PUBLICOVER: All right. And how are
9 they -- how are they considered?

10 ANDY CUTCO: Well, without -- I guess I
11 could get into a lot of detail here, but in the 2016
12 publication that summarized the resilience analysis
13 there were over 70 data layers that were involved.
14 One of the data layers was a land use or land cover,
15 basically what's -- what's occurring on the
16 landscape. Every type of land cover was assigned a
17 value from 1 to 20 in terms of resistance to wildlife
18 movement, so a highly developed landscape would be a
19 20, highly resistant to wildlife movement, an intact
20 mature forest land would be a 1. So roads, hay
21 fields, forests, every type of conceivable
22 development was assigned a number in that analysis.

23 MR. PUBLICOVER: All right. So and
24 something like an interstate highway would be
25 considered -- would have a higher number would be

1 considered to have a higher resistance than say a
2 logging road?

3 ANDY CUTCO: Major roads were assigned a
4 value of 20.

5 MR. PUBLICOVER: Okay. And were
6 transmission lines considered in this analysis?

7 ANDY CUTCO: They were.

8 MR. PUBLICOVER: All right. And how were
9 they considered to be in terms of the resilience to
10 species movement?

11 ANDY CUTCO: The number on a scale of 1 to
12 20 is a -- is a 9 for a transmission line.

13 MR. PUBLICOVER: And so what would that be
14 comparable to?

15 ANDY CUTCO: Well, so for comparison, as I
16 mentioned, mature intact forest is a 1. The rating
17 that is given for private industrial forest land in
18 the United States is 3. So roughly three times the
19 resistance of managed forest land.

20 MR. PUBLICOVER: Okay. And but what other
21 features were sort of in that middle range with
22 transmission lines?

23 ANDY CUTCO: There is something called
24 developed medium intensity, baron land, non-natural,
25 cultivated crops are actually given a 7, developed

1 open space, developed low intensity both 8 et cetera.

2 MR. PUBLICOVER: All right. I don't --

3 ANDY CUTCO: Pipelines and railroads,
4 pipelines are also 9.

5 MR. PUBLICOVER: Okay. Thanks. I'd like to
6 ask a few questions of Mr. Wood. In Mark Goodwin's
7 rebuttal testimony starting on the bottom of Page 15
8 he cites the websites of the Habitat Network in
9 support of the argument of that the corridor provides
10 habitat benefits, are you familiar with this material
11 in Mr. Goodwin's testimony?

12 BRIAN EMMERSON: Yes.

13 MR. PUBLICOVER: All right. And the Habitat
14 Network is a partnership between TNC and the Cornell
15 Lab of Ornithology, correct?

16 ROB WOOD: Correct.

17 MR. PUBLICOVER: Okay. Do you believe Mr.
18 Goodwin has fully and accurately represented the
19 material on the Habitat Network website regarding
20 transmission corridors?

21 ROB WOOD: Not -- not fully. So there is
22 the citation to an article on the website, one
23 article on the website, and there are some bullet
24 points underneath that are in terms of summarizing
25 that article in his rebuttal testimony, but the --

1 the kind of lead in to that article that he
2 references on the website, the Habitat Network,
3 starts out utility corridors run the gauntlet
4 traversing both the physical and the social landscape
5 mile after mile and tower after tower. They
6 distribute energy to cities and towns but also carve
7 their path through the wilderness disconnecting
8 habitats and disturbing the environment.

9 MR. PUBLICOVER: Okay. Thank you. That's
10 all I have.

11 MS. MILLER: Thank you. I'm going to call
12 for about a 10 minute break.

13 (Break.)

14 MS. MILLER: So we're going to go ahead and
15 resume cross-examination of Group 6 witness panel.
16 Right now, I think we are up to Groups 2 and 10.

17 MS. BENSINGER: And if I might just mention
18 for the record that Group 7 has submitted a paper
19 copy of its cross-examination Exhibit 1, so everybody
20 should have a copy of that now. They, I assume, have
21 been handing them out or they're handing them out
22 now.

23 MS. BOEPPLE: Good morning. Elizabeth
24 Boepple representing Groups 2 and 10. I really have
25 very few questions for the panel. Fortunately, Dr.

1 Publicover covered the vast majority of it in the
2 language that you all speak and I don't speak, so my
3 questions are just a few and those go to your
4 pre-filed testimony when all of you basically said
5 that you are neither for nor against the project; is
6 that correct?

7 ROB WOOD: Yes, that's correct.

8 MS. BOEPPLE: And that position seemed to be
9 premised on certain conditions that you would accept
10 as compensation and mitigation; is that correct?

11 MR. TURNER: Objection. I just want to -- I
12 am wondering if there was a citation to --

13 MS. MILLER: Can you speak up? I can't hear
14 you.

15 MR. TURNER: Phelps Turner spokesperson for
16 Group 6. Before we go any further, I just was hoping
17 to get a citation to the testimony so we know where
18 we are because I believe that Ms. Boepple is
19 referring to the last section of Page 1 the testimony
20 says our position in this proceeding is neither for
21 nor against a permit being issued, is that where we
22 are?

23 MS. BOEPPLE: That is correct.

24 MR. TURNER: Okay. I just wanted to know --
25 so the witnesses know where we are.

1 MS. BOEPPLE: Yes.

2 MS. MILLER: Thank you for the
3 clarification.

4 MS. BOEPPLE: And so I'll -- I'll be a
5 little more specific. And in the conclusion sections
6 of your testimony you set forth certain compensation
7 and mitigation proposals; is that correct?

8 ROB WOOD: Correct.

9 MS. BOEPPLE: Okay. And so my question to
10 you really is if those conditions or something
11 similar to those were not part of what the Department
12 imposes, would your -- and they decided to issue the
13 permit, would your position still be neither for nor
14 against the project?

15 ROB WOOD: So ultimately I think we need to
16 see what is put forward as conditions, but if the
17 question is if there are no additional conditions how
18 would our position change. So I think we would say
19 that the measures taken to avoid, minimize and
20 compensate for impacts to habitat fragmentation are
21 inadequate and so that's how we would -- that's how
22 we would approach it.

23 MS. BOEPPLE: And that therefore -- okay.
24 Thank you. Dr. Hunter, what would your position be?

25 MALCOM HUNTER: I would be against the

1 project speaking personally.

2 MS. BOEPPLE: And in your professional
3 opinion?

4 MALCOM HUNTER: Yes.

5 MS. BOEPPLE: Thank you. No further
6 questions.

7 MS. MILLER: Thank you. I don't think there
8 is anyone here from Group 3, so Group 7.

9 MR. SMITH: Good morning. Ben Smith for
10 Group 7. I promise I won't ask any questions about
11 coyotes.

12 (Laughter.)

13 MR. SMITH: So I want to follow-up if I
14 could on I think some comments that Mr. Emmerson had
15 in response to questions from Dr. Publicover and he
16 was asking you about resistance values and obviously
17 you were talking about different values for different
18 types of development. I think you said for like a
19 major or road it would be a 20?

20 ANDY CUTCO: Yes. And it's Mr. Cutco not
21 Mr. Emmerson.

22 MR. SMITH: I'm sorry. I apologize, Mr.
23 Cutco.

24 ANDY CUTCO: No worries.

25 MR. SMITH: Transmission line you said would

1 be about a 9?

2 ANDY CUTCO: Yes.

3 MR. SMITH: And a pipeline would also be a
4 9, correct?

5 ANDY CUTCO: Yes.

6 MR. SMITH: And the reason a pipeline would
7 be a 9 is that presumably because in order to make
8 sure that that line remains reliable over time you
9 don't have roots and what not growing into it, you
10 allow for maintenance going forward, you'd have to
11 clear some portion of a corridor above it?

12 ANDY CUTCO: I think the -- the ranking is
13 that the corridor would be somewhat similar to a
14 transmission line, yes.

15 MR. SMITH: And it would have to be
16 maintained for whatever the duration of that line?

17 ANDY CUTCO: Yes.

18 MR. SMITH: Okay. And you -- have you been
19 here throughout the hearings?

20 ANDY CUTCO: No, I have not.

21 MR. SMITH: Okay. Are you aware that there
22 was testimony that if buried and if feasible to be
23 buried that the NECEC would require a minimum of 75
24 feet cleared of the line if it were buried?

25 ANDY CUTCO: I have not been familiar with

1 the specifics on burial, no.

2 MR. SMITH: Okay. Well, I guess assuming
3 that is the case, would you agree that even if the
4 line were buried it would still maintain a value of
5 9?

6 ANDY CUTCO: I think there are a lot of
7 questions about the specifics of burial and whether
8 it's superficial or directionally drilled or bored
9 and I am not prepared to make the qualification about
10 a ranking of the impact based on the lack of
11 information I have about the specifics.

12 MR. SMITH: Okay. Well, let me ask you this
13 way, I guess assuming that it were going underground
14 and there is some sort of area that would have to be
15 cleared and maintained, would you agree that if that
16 area and if that impact is the same as the
17 transmission line that the buried approach would
18 still have the same value?

19 MS. TOURANGEAU: Can I object that the
20 pipelines that are being referenced in those
21 documents are not necessarily buried?

22 MR. SMITH: Well, I guess -- I don't think
23 Ms. Tourangeau is on the stand here and I don't -- I
24 object to the speaking objection.

25 MS. BENSINGER: What is the nature of your

1 objection?

2 MS. TOURANGEAU: The objection is that he's
3 crossing on something that was outside the scope of
4 his direct and that the question that he's presenting
5 is assuming that the pipelines that he's referencing
6 in those materials that are outside the scope of the
7 direct are buried when there has been no foundation
8 or evidence to that effect.

9 MR. SMITH: I don't think it's outside the
10 scope. I'm sorry.

11 MS. BENSINGER: I would recommend that the
12 Presiding Officer allow the question to be clarified.

13 MS. MILLER: Yeah, I -- can you ask the
14 question and be a little more clear on the
15 assumption?

16 MR. SMITH: Yeah, I can try. I don't think
17 I'll get it out the same way I get it out the last
18 time. But what I think I'm getting at is even if you
19 don't know the particulars of the NECEC and how it's
20 going to be buried, all of the details, would you
21 agree that if the line is to be buried there is going
22 to be some impact, right?

23 ANDY CUTCO: Yes, I agree with that.

24 MR. SMITH: Okay. And if the portion of the
25 land to be cleared is relatively comparable to the

1 portion or is significant compared to the portion of
2 the clearing if it were actually over head that there
3 would be maybe the same values assigned?

4 MR. TURNER: Just a point of clarification,
5 Mr. Smith, I don't have an objection, but if you
6 could clarify whether you're talking about
7 undergrounding the entire line or parts thereof I
8 think that could be helpful.

9 MR. SMITH: I'm talking just any portion
10 that be underground.

11 ANDY CUTCO: Sure. If you took a specific
12 cross-section and had a very similar clearing for a
13 buried line as opposed to an overhead transmission
14 line, I think the impacts on wildlife would be
15 similar.

16 MR. SMITH: Okay. Thank you.

17 MS. MILLER: Okay. Thank you. I think
18 we're now up to Department questions.

19 MR. BEYER: Thank you. Dr. Hunter, on Page
20 3 of your testimony you state there are no known
21 examples of this kind of fragmentation which are
22 comparable in Maine, can you explain that?

23 MALCOM HUNTER: Yes. In terms of a -- I was
24 not aware of any power line of this -- with this
25 scope and length both width and length of going

1 through an analogously intact landscape.

2 MR. BEYER: What about Bangor Hydro's 345
3 line down the Stud Mill Road or the Downeast
4 Reliability Project, are they not comparable?

5 MALCOM HUNTER: That's probably the -- the
6 closest analog. That -- I think there is a
7 difference there in that that power line follows very
8 close -- well, first of all, there are three things
9 there now. There is a gas line, a power line and the
10 Stud Mill Road. The Stud Mill Road is one of the
11 major logging arteries in the -- in the state and has
12 been since the '70s, so it's really not comparable to
13 the Spencer Road, so in that sense it is rather
14 different. It took -- they took advantage of that
15 existing fragment feature and put the power line
16 largely directly along it. There are some -- some
17 deviations.

18 MR. BEYER: Wouldn't the Stud Mill Road be a
19 far more fragmenting feature in the landscape than
20 this would be and the associated infrastructure
21 projects that are located next to it?

22 MALCOM HUNTER: Yes.

23 MR. BEYER: Okay. Mr. Wood, in your
24 first -- on Page 9, first paragraph of your direct
25 testimony, you state the Department and MDIF&W have

1 required compensation for mitigation -- compensation
2 and mitigation for impacts which were not
3 specifically required including cold water fisheries.
4 Can you discuss why you think that, please?

5 ROB WOOD: Yeah. So it's my
6 understanding -- so the, for example, the
7 compensation for corridor fisheries, the 200,000 for
8 culvert replacements, but that's not addressing the
9 regulated resource under NRPA in the same way that
10 addressing the Roaring Brook Mayfly or the spring
11 salamander is addressing RTE species. Is this
12 specifically for me or the entire panel?

13 MR. BEYER: Anyone can answer.

14 ROB WOOD: Okay.

15 BRIAN EMMERSON: This is Brian Emmerson. I
16 would -- I would think we're also forgetting the fact
17 that it's not specifically called out as significant
18 wildlife habitat or -- and I don't think -- and I
19 don't believe brook trout are rated as a rare,
20 threatened or endangered species in the state, so
21 that's where we're going.

22 MR. BEYER: Okay. Back to Dr. Hunter.
23 There has been lots of testimony this week that there
24 is an abundance of early successional forest in this
25 part of the State of Maine. Is there particular

1 patches of mature forest that this project goes
2 through that are particularly going to be
3 particularly impacted; in other words, they're mature
4 now and they will be removed?

5 MALCOM HUNTER: I am afraid I can't answer
6 that -- that question. I was out of the country for
7 most of the month of March and so I had limited time
8 to prep for this.

9 MR. BEYER: Okay. In your summary you also
10 said that this project would be the log on the
11 camel's back. Would it break the camel's back?

12 MALCOM HUNTER: I anticipated that question.
13 I did get a chance to listen to the live-stream and I
14 have heard you ask the tipping point question of
15 other people. It's an interesting and important
16 question. One that I've thought a lot about in
17 generic terms. I've actually written a paper about
18 the interface between ecological tipping points and
19 public environmental policy. The tipping points are
20 incredibly important where they exist, but they are
21 actually relatively uncommon. Most ecological
22 responses are just nice long lines. There may be
23 some bends in the line, but there aren't, you know,
24 break points like that under most circumstances.
25 The -- so in environmental policy it's really

1 important to think about those tipping points and
2 avoid them obviously, but 9 times out of 10, 95 times
3 out of 100 we're really just making arbitrary
4 selections, arbitrary points along a -- on a
5 continuum of impact and I -- honestly, I think that's
6 what we're talking about here. The -- I don't
7 honestly believe that, you know, half the populations
8 of species in this region are going to go extinct if
9 we cross some line. But back to my big log, I am
10 saying that along that continuum of environmental
11 impact that would shift us along there dramatically.

12 MR. BEYER: Nothing further. Thank you.

13 MR. BERGERON: I guess I'd like to hear from
14 each of the panelists. Some of the lines of
15 questioning yesterday relate to priorities of
16 different types of mitigation techniques whether it's
17 burying sections of the line in Segment 1, additional
18 taperings, raising pole heights, certainly your
19 Exhibit 7 of your direct testimony from TNC has a
20 number of areas. Could you help prioritize those
21 areas and describe whether that would be additional
22 pole heights tapering or undergrounding?

23 ROB WOOD: So I'll pass it down the line in
24 just a minute. I just -- I would start by saying
25 that, you know, kind of on a principle level our core

1 priority would be to retain mature forest where it
2 currently is and to allow for a mature forest growth.
3 And so to the extent that mitigation techniques can
4 allow for that so, for example, raising pole heights
5 in areas and of course taking into consideration
6 scenic impacts as well, but the fact that, you know,
7 full mature forest canopy cover can be allowed
8 under -- under the poles for Northern Spring
9 Salamander and Roaring Brook Mayfly that's important
10 also. Horizontal and directional drilling to allow
11 for forest canopy to remain on the surface. Those --
12 those two would be the best in terms of allowing for
13 full forest canopy cover.

14 And that -- I would say another point just
15 to bring up is that we believe that tapering and
16 wildlife travel corridors kind of as they've been
17 proposed in the deer -- deer wintering area for
18 Segment 1 that those techniques aren't mutually
19 exclusive, so you could combine those as well as
20 potentially raising pole heights enough to allow for
21 vegetation that's high enough to -- to allow for
22 movement of species like marten, but I would believe
23 kind of the prioritization to some of my colleagues
24 here, but I think on the principle kind of approach
25 that the least impact on habitat connectivity would

1 be retaining mature forests, which could be achieved
2 through a couple of those techniques.

3 BRIAN EMMERSON: Yeah, I can just add on.
4 This is Brian Emmerson. I'll largely just echo what
5 Mr. Wood just said, but just to emphasize the point
6 that I think a lot of these measures can be done in
7 combination with each other to create a really, you
8 know, to create a better area of connectivity, so if
9 this project were to be approved as is we would like
10 to, you know, see some of those measures I think done
11 in combination in multiple, you know, ideally along
12 the whole corridor if possible, but in some select
13 areas.

14 ANDY CUTCO: This is Andy Cutco. I'll speak
15 to the, I guess, the spacial prioritization. We
16 submitted a map indicating about nine different that
17 we had identified as potentially important areas for
18 connectivity. We did that based on our knowledge of
19 riparian areas or streams, wetlands and land cover.
20 As I listened to some of the testimony of Group 4, I
21 recognize that a lot of the areas that were
22 identified as priorities for stream crossing and
23 brook trout habitat actually do align quite well with
24 our priority areas for connectivity. However, that
25 analysis, I think, could use a more robust discussion

1 particularly with IF&W. We would appreciate IF&W's
2 input on additional important areas for connectivity
3 and a greater review of ours.

4 And the other comment I would make is that a
5 lot of this, I think, in terms the mitigation
6 techniques the specifics can be site specific in
7 terms of the specific -- the western part of Segment
8 1 in particular has a lot of topography, rugged
9 mountains, valleys, and so I would think some
10 analysis there would be useful to look at where pole
11 heights -- raising pole heights and tapering and
12 combining that with minimal visual impact could
13 produce some positive results both in terms of
14 wildlife and minimizing impacts on scenic character.
15 Obviously, the scenic character is not something that
16 we have expertise in, but we know that's a
17 consideration that DEP is looking at as well.
18 Anything for you, Malcom?

19 MALCOM HUNTER: Well, again, as I explained,
20 I have not had the time to get into sort of the
21 specific segment by segment issues here, but speaking
22 generically as somebody who, frankly, instead of
23 prepping for testifying today, I spent a half of the
24 last four days listening to this live-stream here. I
25 couldn't tear myself away. And the -- and I've heard

1 this issue come up repeatedly in terms of
2 prioritization for mitigation and the alternatives
3 and I am now hearing five alternatives, the burying
4 the line, co-locate with the Spencer Road, raise pole
5 height, taper vegetation and do whatever is proposed
6 for the deer wintering areas, the corridors for deer
7 movement and it strikes me that a number of those are
8 combined, so there is probably at least a dozen
9 different possibilities and some of those
10 possibilities would make sense in different segments,
11 et cetera, but the -- but at the end of the day, I
12 begin to have enough understanding of the
13 environmental mental impact and the real cost from
14 independent sources of what it would take to
15 undertake those and I think there is a lot of
16 analysis and further information that's going to be
17 needed to sort this out.

18 ANDY CUTCO: I'd like to make a, I guess,
19 one more reflection on the mitigation that's been
20 discussed. As we among our team have talked about
21 the various proposals that have come forward, I am
22 personally not convinced that even if a lot of these
23 on-site mitigation techniques were implemented, I
24 think we would still -- I think we would still have
25 some potentially significant impacts from the

1 corridor and so I think the possibility of conserving
2 additional land to offset those impacts where we
3 could ensure contiguous mature forests were conserved
4 in the region, I think is certainly an important and
5 viable part of the mitigation package as well.

6 MR. BERGERON: Thank you.

7 MS. BENSINGER: I do have a few questions.
8 Mr. Wood, you mentioned today and on Page 9 of your
9 pre-filed direct testimony that your recommendation
10 is to have the vegetation on the corridor tapered.
11 Today in particular you testified that you
12 recommended that the whole width of the 150 foot wide
13 corridor not be cut initially and have the edges then
14 grow back. Is it your understanding that CMP's
15 proposal for the Coburn Mountain section is to cut
16 the width of the 150 foot section and then let the
17 edges grow back to a tapered look?

18 ROB WOOD: So I am not sure that that
19 question is actually addressed in the application
20 material, so I'm not sure that's in the record in the
21 application materials or testimony. What I believe I
22 heard this week and, you know, have heard from CMP is
23 that the -- it would be possible for trees of the
24 height limitations that they've discussed for a
25 tapering scenario to be retained during the initial,

1 you know, construction if the project were to be
2 permitted and so that would be, you know, really
3 important, right, because as we've heard from others
4 here today if you take down all of the vegetation
5 currently in that corridor it will take quite some
6 time for it to grow back and that would be
7 problematic and so the idea that you can retain
8 existing vegetation, you know, up to 35 feet high in
9 certain segments, up to 25 feet high in other
10 portions and up to 15 feet high as, you know, if the
11 corridor were permitted and constructed that being
12 able to leave that vegetation there to say it's
13 helpful, but, again, I would, you know, say there are
14 other techniques in addition to vegetative tapering
15 that could retain, you know, a higher canopy.

16 MS. BENSINGER: In your testimony you
17 reference the Bingham wind permit as required a
18 v-shaped transmission corridor, v-shaped vegetation.
19 It's been a while since I've looked at the Bingham
20 wind permit, can you elaborate on how wide that
21 transmission corridor is and what that v-shape
22 vegetation would look like?

23 BRIAN EMMERSON: Yeah. I can -- I can take
24 that. This is Brian Emmerson. That was -- so the
25 Bingham one, that particular line was a generator

1 V-line that came from the wind turbines into the
2 grids, so I believe it was a 115 kV line, I think.
3 And from looking at the permits -- and I have a
4 couple notes here if you give me just a second. I'm
5 looking at the order that was issued by the -- by the
6 Department, the -- it was that particular area that
7 was within a deer wintering area, a mapped deer
8 wintering area, and so I believe that was mitigation
9 for impacts and so the line was cut in a v-style
10 during clearing and they were left with I believe at
11 least as far as what the order said and I didn't -- I
12 haven't been on the ground to see how it came out in
13 reality, but the order said they were going to leave
14 a 21 foot wide section down the middle which they
15 used for access during construction, but for the rest
16 of the line it was the vegetation was then tapered
17 outward and got gradually larger as you moved --
18 moved towards the edge.

19 MS. BENSINGER: And I'm not sure who on the
20 panel would answer this, there has been a fair amount
21 of discussion about travel corridors, wildlife travel
22 corridors, can someone take a stab at explaining
23 how -- how wide that would be in terms of as you
24 go -- as you travel across the corridor if you were a
25 wildlife -- if you were a deer or something, a fox,

1 how wide do you think those should be and how does
2 that work when you get to the wire zone where you
3 have to have scrub/shrub habitat vegetation?

4 ROB WOOD: I'll speak to that to the extent
5 that I can and I'll pass it down just to say that
6 in -- in my reading of the application materials and
7 compensation plan, I haven't seen specific diagrams
8 of what that would actually look like in practice and
9 so I think it's an important point that all of these
10 concepts, you know, should be elaborated on and
11 looked at more closely and then, you know, if they
12 were ever applied to be monitored pretty closely, but
13 I would say that the -- so the idea is that closer to
14 the poles where there is less sag the vegetation can
15 grow higher and so they would allow 35 foot high
16 vegetation near the poles and then where there is
17 something you would wind up with scrub/shrub is my
18 understanding. But I -- in terms of what would be
19 necessary for species movement, I -- if that's part
20 of the question I would like to defer to my
21 colleagues.

22 MS. BENSINGER: Yes. Two things, one, so
23 that makes sense that the travel corridor would be
24 put near a pole so the vegetation could be a lot
25 taller. So how wide would it be and one of the

1 reasons I'm asking that is we heard testimony, I
2 think it was yesterday, about the concern about the
3 effectiveness of a travel corridor due to blowdowns.

4 ROB WOOD: Correct. And I would -- so in
5 terms of how wide it would be I would have to go back
6 and look at the compensation plan again, but I -- I
7 know the Applicant references a specific number of
8 feet in total for deer travel corridors and so I
9 suppose if you took that and divided it by -- that
10 might include the portion where the line is drilled
11 on either side of the Kennebec and so I'm not sure
12 that it's actually identified exactly how wide that
13 would be.

14 MS. BENSINGER: Excuse me, but my --

15 ROB WOOD: Yes.

16 MS. BENSINGER: But my question is what
17 would you recommend --

18 MR. WOOD: Oh, okay.

19 MS. BENSINGER: -- for the width? How wide
20 should it be?

21 ROB WOOD: In order to avoid blowdown and
22 allow for movement, um... I defer to --

23 MALCOM HUNTER: I don't think there is a
24 right answer to this. And it's possible that
25 somebody might have an answer for white-tailed deer,

1 but I would be inclined to respond generically and
2 say the wider the better, the more species will be
3 encompassed the wider the it is. But, again, it
4 comes back to the absence of real thresholds in the
5 ecological world. It's not like if it's is a hundred
6 feet wide, everybody is going to go across it and if
7 it's 80 feet wide nobody is going to cross it. The
8 world doesn't work that neatly.

9 ROB WOOD: And may I -- so there was a
10 question about the blowdowns too and so I think
11 that's what we were getting at and maybe there is a
12 more precise answer there. I don't have it, but in
13 terms of what would be sufficient to -- okay. No.

14 MS. BENSINGER: Thank you.

15 ANDY CUTCO: Well, I mean, I can embellish
16 on that a little bit. It's obviously site specific
17 as so many of the things we've talked about are.
18 It's going to depend on the forest type and the soils
19 and the adjacent habitat, so it's -- unfortunately,
20 there is no one size fits all answer here.

21 MS. MILLER: I just have one question. I
22 think I heard you testify today about just as part of
23 the compensation mitigation plan relating to things
24 like culvert replacement that the dollar amount was
25 insufficient and I think I heard that earlier in the

1 week as well and I'm wondering if TNC has a sense of
2 what the need and the scope of that kind of work is
3 in that area and what a better more appropriate
4 amount might look like.

5 ROB WOOD: Okay. So we don't have anyone
6 from a fresh water team here today, but I would say
7 the scope of the need is substantial. We do work
8 with private landowners on doing Stream Smart Culvert
9 replacements on a regular basis as well as municipal
10 culvert replacements and over the past decade plus we
11 have partnered with the State of Maine to survey all
12 of the stream crossings in Maine and I think we are
13 almost done with that and so there is actually a
14 tool -- a publicly accessible tool, the Stream
15 Habitat Viewer that shows all of the public culvert
16 crossings in -- or stream crossings -- road stream
17 crossings in Maine where there are culverts or other
18 road stream crossings. The private -- data for
19 private lands is proprietary as was mentioned
20 yesterday, but there are, you know, I don't know the
21 exact number. I would say north of 2,000 at least
22 public culvert replacements, I mean, culverts that we
23 have identified and they are ranked in terms of
24 whether they are an impediment to fish passage and
25 how significant that impediment is and so there are

1 publicly available data to look at how many municipal
2 culverts are there out there that have been
3 identified as an impediment to fish passage. But I
4 think the overarching point is that, you know, it
5 requires a minimum of say 50,000 roughly to do a
6 Stream Smart Culvert replacement on even a private
7 road and for, you know, municipal culvert
8 replacements it can be substantially more than that.
9 And so, you know, I think we would argue that if
10 there is going to be significant work done as
11 mitigation for impacts that require habitat
12 connectivity there would, you know, need to be
13 significantly more amount of compensation. Do you
14 want to add onto that?

15 BRIAN EMMERSON: Yeah, I'll add a little
16 bit. I think I remember testimony from the first day
17 way back on Monday where I was just watching on the
18 live-stream, but I think that number of the 20 to 35
19 culverts that was included in the application I
20 believe was I think, and correct me if I'm wrong, but
21 that was based on, I think, a 20 inch culvert was
22 what I heard -- I heard someone say in CMP's
23 testimony. And from -- from our understanding that's
24 -- that size culvert is not going to be large enough
25 to pass the vast majority or to include the vast

1 majority of a 1.2 bankfull on a stream, so I think
2 that may be where the number comes from. But, again,
3 to echo Rob's point we think that number is not going
4 to get to that -- that \$200,000 will not get to that
5 number of culverts. I think others have testified to
6 that fact, too. But in terms of prioritization, as
7 you said, I think I would offer that we certainly
8 have the folks back in our office who could answer
9 that question a little better if we needed follow-up
10 there could be people who could -- would know that
11 region in terms of streams that we could provide a
12 little more information on that.

13 MR. BERGERON: Going back to these wildlife
14 corridors, I'm trying to kind of wrap my head around
15 what that would ultimately look like on the ground if
16 that's something that the Department conditioned and
17 I guess my question relates to a big metal pole in
18 the middle of it. So obviously if the pole is
19 roughly 100 feet tall with the wires up tall and then
20 tapering down and in theory if there could be some
21 length along the corridor, 100 feet, 200 feet, 500
22 feet whatever it might be, does anybody have a sense
23 of what a big metal pole in the middle of that would
24 do to impede any of the wildlife crossing in that
25 area?

1 BRIAN EMMERSON: Yeah, and that's a good
2 question and I think that we -- it does come down to
3 the details of what those crossings are going to look
4 like and I think that it gets to our -- I mean, from
5 my understanding, you know, there will be, and I
6 don't know the exact number, but there will be X
7 amount of feet around that pole where that equipment
8 needs to be, you know, a separate pole in the ground.
9 And maybe even -- I haven't -- I'm not sure, but
10 maybe even a travel corridor from pole to pole as the
11 equipment moves down the line it would at least be
12 initially cleared as it moves down the line and I
13 think that speaks to the -- to the point that
14 Mr. Cutco made a minute ago and that's why we still
15 feel that regardless of the mitigation measures there
16 is still going to be a habitat fragmentation impact
17 sort of regardless even if -- even the use of these
18 minimization measures they may, you know, make the
19 situation incrementally better, but we do still feel
20 that there is a need for additional, you know, land
21 conservation to offset those particular impacts.

22 ANDY CUTCO: I would just add that I think
23 another consideration is the types of habitats that
24 wildlife are often using as corridors and I think the
25 research shows that something like 85 percent of

1 furbearing species in Maine use wetlands and riparian
2 systems at some point during their life cycle so,
3 again, alignment a lot with the brook trout concepts
4 that were presented earlier this week and the value
5 of having riparian or wildlife movement corridors
6 along riparian systems that also makes it a little
7 bit challenging when you think about having a pole
8 kind of right in the middle of that, so that's --
9 there is an issue there that obviously needs to be
10 balanced about -- about pole location and sort of
11 protecting the integrity of that travel corridor
12 along with the riparian systems, trout streams, et
13 cetera.

14 MR. BERGERON: Thank you.

15 MS. MILLER: Okay. Thank you. Any
16 redirect?

17 MR. TURNER: Phelps Turner, Conservation Law
18 Foundation. There have been some questions this
19 morning for the panel about the impact of linear
20 corridors including the U.S./Canadian border and
21 various utility corridors including the Stud Mill
22 Road corridor and my question goes to anybody on the
23 panel, can you describe the Stud Mill Road corridor
24 in terms of where it's located and in terms of
25 connectivity and resiliency?

1 MALCOM HUNTER: Well, the corridor runs from
2 the Bangor area over to the Canadian border. It was
3 originally, I described earlier, a large sort of
4 logging road artery that was put in in the '70s and,
5 oh, boy, how long ago, 10 or 15 years ago, something
6 in that area, the -- I think first came the gas
7 pipeline and then the utility, the electric
8 transmission line. It is unquestionably a very
9 conspicuous feature. I used to know it well. I
10 rarely go there anymore. It's not much fun to drive
11 along the Stud Mill Road any longer because of the
12 width of it and all of the infrastructure that is
13 there. Have there been any studies of the impact of
14 that on movements in wildlife? Not that I know. One
15 can extrapolate that, you know, the wider the opening
16 the more the impact and it has gone from quite wide
17 to extremely wide, but what its impact has been, I
18 don't -- I don't know.

19 MR. TURNER: And anybody else have any
20 questions, or sorry, answers to that? Does -- is
21 anybody on the panel aware of the studies of
22 connectivity or resiliency in that area?

23 ROB WOOD: Well, if you're speaking to
24 the -- where it all is kind of interconnected with
25 landscapes...

1 MR. TURNER: Yes.

2 ROB WOOD: Do you -- can you speak to that,
3 Andy?

4 ANDY CUTCO: Not off the top of my head. If
5 we brought up a map I think we could all probably
6 figure out where the Stud Mill Road is, but --

7 MS. MILLER: Can you speak into the mic, I'm
8 sorry.

9 ANDY CUTCO: Yes, the question was am I
10 familiar off the top of my head with the connected
11 and resilient lands mapping in relation specifically
12 to the Stud Mill Road and I said that's not embedded
13 in my head. If we brought up the map, I'm sure we
14 could try to figure out where the Stud Mill was, but
15 I'm not sure if that's where you want to go or not.

16 MR. TURNER: Okay. Thanks. No further
17 questions.

18 MS. MILLER: Any recross?

19 MS. GILBREATH: No, thank you.

20 MS. MILLER: Anyone else? Okay. So I think
21 we are at the point where we are going to conclude.
22 So I just want to say thank you all for your
23 participation in this adjudicatory hearing. I really
24 appreciate everybody's flexibility and willingness to
25 repeat who you are throughout the process because it

1 really helps us keep names and groups straight for
2 the transcript, so a very big thank you to all of you
3 for that.

4 As you know, the hearing will not conclude
5 today as it will continue on May 9 and that's going
6 to be up in Bangor. After the hearing closes on May
7 9 no more evidence may be submitted by the parties,
8 however, the parties do have the opportunity to
9 submit closing briefs, proposed findings of fact and
10 reply briefs. At this time, it is my understanding
11 that the transcript will be ready in approximately 30
12 days and then for the portion we have on May 9 my
13 understanding is that it will be ready about a week
14 after that, so that will allow folks to have a chance
15 to look at -- start looking at the transcript for
16 this week just prior to the May 9 date.

17 Closing briefs will be due after the
18 transcript has been provided to the parties.
19 Typically we allow two weeks for closing briefs, but
20 in this case due to the volume of information I'm
21 thinking perhaps three weeks is more appropriate. As
22 a reminder, with closing briefs you may submit
23 proposed findings of facts. So I'd like to hear from
24 all of the parties what your thoughts are on the
25 timing of the closing briefs and the findings of

1 facts and we'll start with the Applicant on that.

2 MR. MANAHAN: Thank you. So we believe that
3 we've had plenty of time to be able to and we will
4 have time between now and May 9 to be able to analyze
5 what's happened here at this hearing and pull
6 together briefs and findings of fact, so we would
7 request that all post-closing briefs and finding of
8 facts be due no later than two weeks after the May 9
9 hearing date.

10 MS. MILLER: Okay. So I'm just going to
11 clarify that it will be two weeks after everybody
12 receives the transcript because I want -- I expect
13 parties to have --

14 MR. MANAHAN: I'm sorry, I misspoke.

15 MS. MILLER: Okay.

16 MR. MANAHAN: Two weeks after the
17 transcripts are available.

18 MS. MILLER: Okay. Thank you. Group 1.

19 MR. HAYNES: So it would be five weeks. We
20 have three weeks for transcript and then two weeks
21 after?

22 MS. MILLER: No, so the transcripts are
23 going to be coming sort of at two different times.
24 We're expecting the transcripts to be ready for this
25 particular week just before May 9 and then after May

1 9 it will be another week before we get the
2 transcripts from that particular day of the hearing,
3 so after everybody receives all of the transcripts,
4 which I think is going to be, what, about May 16 for
5 sake of reference. That's what we're talking about.
6 After everyone receives the transcripts, you know,
7 what is the amount of time that you would need to
8 have your closing briefs and findings of fact and I'm
9 just suggesting --

10 MR. MANAHAN: Could I just --

11 MS. MILLER: -- I'm suggesting, you know,
12 typically we do it in two weeks and I'm asking in
13 this case if you think you'll need three weeks.

14 MR. MANAHAN: Could I just clarify what you
15 just said, Ms. Miller? The transcripts for this
16 whole week will actually be 30 days from now, so that
17 will be available like a --

18 MS. MILLER: About May 6.

19 MR. MANAHAN: May 6 and then so May 9 plus a
20 week and then, what, May --

21 MS. MILLER: About May 16.

22 MR. MANAHAN: May 16. Okay. So I guess I'm
23 just trying to calculate how much time we'll have the
24 transcripts for this week, so I guess my point being
25 we'll only have one day of transcripts that would

1 be -- that we would only get two weeks prior to or
2 whatever it is prior to the briefs being due is all
3 I'm saying.

4 MS. BENSINGER: Also, the record does remain
5 open for 10 days plus 7 days after the May 9 hearing
6 for members of the public to submit comments, so
7 the briefs should not be due definitely before that
8 final closure.

9 MR. MANAHAN: Although public comments could
10 be addressed in reply. We're going to have reply
11 briefs, right, due maybe after the post-hearing
12 briefs.

13 MS. BENSINGER: That -- so that's your --
14 that's your position, right?

15 MR. MANAHAN: That we could address public
16 comments in the reply brief.

17 MS. BENSINGER: That's -- that's one idea.
18 Let's hear from all parties.

19 MS. MILLER: Yeah, what I'm trying to do is
20 solicit information from all parties to take under
21 consideration. I'm not going to make a decision
22 today, but I just want to hear, you know, what your
23 positions would be, so I appreciate that. So I'm
24 sorry, did I help clarify for you Group 1?

25 MR. HAYNES: I guess a date would be good

1 instead of so many weeks after. So we're looking at
2 two submissions of briefs for this hearing and
3 another one for the 9th?

4 MS. MILLER: No. So it's all the same
5 hearing. It's just that for purposes of getting the
6 transcript ready they are going to do it in two
7 separate batches. So even though we have an extra
8 day of the hearing on May 9, it's still part of the
9 same proceeding, the same hearing, and so my -- my
10 feeling was once all of the transcripts are in for
11 the entire proceeding, which is both what we have for
12 this week and the May 9 date that's when I start to
13 look at how much longer do we provide everybody for a
14 chance to put the closing briefs and findings of fact
15 together and so my suggestion was two weeks or three
16 weeks and so I just want to find out what your
17 preference would be.

18 ROBERT HAYNES: Like June 1?

19 MS. BENSINGER: We -- we don't have an exact
20 date when the transcript will be ready, so we -- we
21 are just going to go with the amount of time you
22 would like following when the transcript -- the last
23 of the last transcript comes in, so what would be
24 your preference? How much time do you need after?

25 ROBERT HAYNES: Let's go for three weeks

1 after the last information is available.

2 MS. MILLER: Thank you. I apologize this is
3 so confusing. We have that wonky closing schedule
4 and with an extra day of hearing and it gets a little
5 confusing. How about Groups 2 and 10?

6 MS. BOEPPLE: So first of all, I'd like to
7 clarify again. Elizabeth Boepple speaking, counsel
8 to Groups 2 and 10. The briefs and the findings of
9 facts and the proposed conclusions are related to all
10 of the criteria; is that correct?

11 MS. MILLER: Yes.

12 MS. BOEPPLE: Okay. That's for the purpose
13 of those who are unrepresented here to make sure they
14 understand the scope of the brief. So other --

15 MR. MANAHAN: Can I just -- I'm sorry --

16 MS. BENSINGER: No, they would be related to
17 the hearing criteria. The hearing criteria.

18 MS. BOEPPLE: Only.

19 MS. BENSINGER: Yes.

20 MS. BOEPPLE: So you won't be accepting any
21 written brief related to the additional criteria?

22 MS. BENSINGER: Just -- you can submit
23 comments into the record on that.

24 MS. BOEPPLE: Okay. Thank you for that
25 clarification. Our position is that we'll need at

1 least three, at least three weeks and four weeks
2 would be preferable after the final deadline whether
3 that is receipt of the transcript or the close of the
4 public comments after the May 9 date.

5 MS. MILLER: Thank you. Group 4.

6 MS. JOHNSON: We will be busy getting ready
7 for the May 9 hearing, so we'll have no opportunity
8 to look at the transcript before the May 9 hearing,
9 so I think as a practical matter we would request
10 four weeks after all of the information that is part
11 of the record has closed and no more information is
12 coming in. One of the things that has been very
13 difficult about this process is that we think we know
14 all of the information and then suddenly we get
15 another 500 pages, so. And I am also a little bit
16 unclear about the written comments whether -- so
17 the -- I had assumed that we could address issues
18 that are raised in the written comments in the
19 briefs, if not, then the question is is there a
20 rebuttal opportunity for written comments?

21 MS. BENSINGER: Members of the public --
22 this has been added to our process because the LUPC's
23 rules requires that it has this wrinkle in its
24 process, so members of the public are allowed to
25 submit written comments for, I think, 10 days

1 following the hearing and then the members of the
2 public are allowed to submit responsive written
3 comments for 7 days after that. Certainly if those
4 written comments address hearing topics, the parties
5 are free to reference them, they're part of the
6 record, in their briefs and proposed findings of
7 facts.

8 MS. JOHNSON: Okay. So I would summarize by
9 saying we would like four weeks after the last date
10 that comments are being accepted, whatever that date
11 ends up being. But I had a related question and
12 since I have the mic I'll ask it. Written comments
13 by the Intervenors and the Applicant, could you
14 clarify what your thinking is about the schedules for
15 those and whether there is an opportunity to respond
16 to those written comments after the deadline? It's
17 my understanding the deadline for those written
18 comments by Intervenors and the Applicant are the
19 close of hearing potentially or that's what it would
20 have been.

21 MS. BENSINGER: That's correct and there is
22 not an opportunity to respond to those.

23 MS. JOHNSON: Okay. Thank you for that
24 clarification.

25 MS. BENSINGER: And those would be on

1 non-hearing topics.

2 MS. JOHNSON: Okay. Thank you for that
3 clarification. Actually, one other clarification, I
4 think you just said it, but I just want to be really
5 clear, so the briefs and the findings of fact are
6 only on the hearing testimony and not on the written
7 comments put in by the Intervenors --

8 MS. BENSINGER: The hearing topics. They're
9 on the hearing topics.

10 MS. JOHNSON: Hearing topics. Got it.
11 Thank you.

12 MS. MILLER: Okay. Group 5. I don't think
13 we have Group 5 here. Group 6.

14 MR. TURNER: We would respectfully suggest
15 four weeks.

16 MS. MILLER: Group 7.

17 MR. SMITH: Ben Smith for Group 7, I think
18 we could work in within any of the time frames that
19 has been suggested.

20 MS. MILLER: Group 8.

21 MS. TOURANGEAU: I believe -- this is Joanna
22 Tournageau for NextEra, also Group 8. I believe that
23 there is still a motion pending on whether there is
24 going to be additional engineering information that's
25 submitted or witnesses that are called at the May 9

1 hearing. There is also new rebuttal testimony that
2 is going to be coming in on April 19 and I wouldn't
3 be surprised given how these proceedings have gone if
4 there is additional mitigation compensation avoidance
5 information that comes in, so it seems to me that a
6 minimum of four weeks is going to be necessary given
7 the volume of stuff that is as yet unknown for the
8 May 9 hearing that hasn't been in front of us yet, so
9 I would say a minimum of four weeks is necessary.

10 MS. BENSINGER: Thank you for that input.

11 MS. JOHNSON: Excuse me, can I just clarify?
12 I had said four weeks from the written -- deadline
13 for all of the written stuff. My assumption was that
14 the transcripts would be available before that time.
15 If the transcripts come in after the written comment
16 deadline then it would be four weeks from the
17 transcripts.

18 MS. BENSINGER: Okay. Thank you.

19 MS. JOHNSON: Thank you.

20 MS. TOURANGEAU: Can I ask a clarifying
21 question too? I'm sorry, I meant to ask it a minute
22 ago.

23 MS. MILLER: Yes.

24 MS. TOURANGEAU: This is Joanna Tourangeau
25 again. You had said earlier just a moment ago that

1 the findings of fact could only be -- the draft
2 findings of fact could only be on the hearing topics,
3 is that accurate or would the draft findings --

4 MS. BENSINGER: We were thinking that the
5 briefs and proposed findings of facts would be on the
6 hearing topics only.

7 MS. TOURANGEAU: Okay.

8 MS. BENSINGER: So thank you all for that
9 input. I just wanted to talk about the timing of the
10 ruling on the motion. It was Groups 2 and 10, right,
11 the motion requesting the CMP engineers present at
12 the May 9 hearing to answer deferred questions. We
13 are -- we have scheduled for 12:15 a consultation
14 with our LUPC colleagues to discuss a ruling on that
15 motion, so we will get a rule on that motion out as
16 soon as possible. We also have to include
17 Mr. Worcester, the Chair of the LUPC, so the
18 scheduling is a little tricky, but I wanted you to
19 know that we hadn't forgotten about it and we're
20 working on getting a ruling on that. There was only
21 one other document that I think we discussed trying
22 to get submitted, which is pretty impressive given
23 the length of the hearing. Usually there are all
24 sorts of loose ends, but and that was the -- Jim will
25 address that.

1 MR. BEYER: The -- in the Harris Dam
2 relicensing it was the Indian Pond fish habitat
3 restoration study plan. I have asked Kathy Howatt,
4 our hydropower coordinator, to see if she can track
5 that down in the file. We'll -- she obviously can't
6 do it instantly and as soon as we find that we will
7 make it available to the parties.

8 MS. BENSINGER: Thank you.

9 MS. JOHNSON: Excuse me.

10 MS. MILLER: Yes.

11 MS. JOHNSON: Mr. Reardon just informed me
12 that he did some research on the availability of this
13 document last night and he'd be happy to share that
14 information with you now if you would like it.

15 MS. MILLER: Sure.

16 JEFF REARDON: So I searched the FERC record
17 for what I could find for reports of that, but I've
18 never used that interface. It is not an easy
19 interface to look at 12 years worth of information
20 from. And I found the beginning of the process and
21 the end of the process and not some of the middle
22 missing pieces. So there is a -- there was a desktop
23 study and a field study. I found the study plan for
24 the desktop study, the reports of the desktop study,
25 some of the results but not the study plan for the

1 field study and then I found a final record after two
2 restoration projects were completed about how those
3 had performed after several years, so there are some
4 missing pieces along the way. I'm happy to send you
5 what I found. The good news is most of it was in PDF
6 format. There was one file that was in a .tif which
7 is way too large to email, but I could bring it to
8 the Department on a thumb drive.

9 MR. MANAHAN: Could I just add -- this is
10 Matt Manahan. To the extent that Mr. Reardon is
11 proposing to submit an incomplete document, he hasn't
12 been able to find the complete document in response
13 to your question, Mr. Beyer, I would object to that
14 admission of an incomplete document for the record.
15 Thank you.

16 JEFF REARDON: If I may finish, I also this
17 morning emailed Kyle Murphy, who was the Brookfield
18 contact on the project. Kyle is on vacation this
19 week, but he did get back to me and say much of this
20 preceded his time at then FPL. He said he would look
21 for it when he's back next week in his files, but he
22 passed on that the person from whom he had inherited
23 the files had not been a great filer.

24 MS. MILLER: Okay. I'm going to just
25 interject here and say the Department is going to do

1 what it can to track this document down, whether
2 that's Mr. Beyer working with Mr. Reardon or working
3 with Ms. Howatt within the Department and then we'll
4 share that with the parties.

5 MR. MANAHAN: Thank you.

6 MS. MILLER: Okay. Thank you all for your
7 input on closing briefs. Clearly, we can't make a
8 decision quite yet, but I do appreciate your input on
9 that, so we will confirm a deadline for that once
10 we're a little farther along in the process. I just
11 wanted to let you know that you did have that
12 opportunity and we were trying to get a sense from
13 you from what your time needs are going to be.

14 Okay. So as I -- as we mentioned just to
15 get into the record a little bit more clearly,
16 written comments from the public, not parties, will
17 be accepted by the Department and Commission for 10
18 days following the conclusion of the hearing,
19 assuming the conclusion of the hearing is May 9 that
20 would be May 20. For an additional 7 days, members
21 of the public, not parties, may file statements in
22 rebuttal to those comments received in the above 10
23 day window, again, assuming the closing of the
24 hearing is May 9 that would put those comments --
25 that comment deadline at May 27. Comments that do

1 not meet this criteria will not become part of the
2 record. So written comments from the public should
3 be sent to the Maine Department of Environmental
4 Protection to Mr. Jim Beyer or the Land Use Planning
5 Commission to Mr. Bill Hinkel. At any -- at this
6 point, does anyone have any other questions?

7 MS. TOURANGEAU: My question is on
8 scheduling for May 9 and so I don't want to ask this
9 if it's better for me to talk to Peggy separately
10 about the availability of Mr. Russo for that hearing.

11 MS. MILLER: Okay. I think we can have -- I
12 can have you talk with Ms. Bensinger about that
13 off-line. Any other questions? Okay. If not, then
14 I'm going to officially close for this week's portion
15 of the hearing and we will resume again on May 9.
16 Thank you.

17
18 (Hearing continued at 12:00 p.m.)
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* * * * *

CELL PHONE VOICEMAIL LEFT FOR MR. BEYER

1
2
3 Yeah, I'm a voter in Maine and I would like to
4 know if you are going to let the CMP corridor pay you
5 off to let it go through. Seeing as how corrupt this
6 government is even in the State of Maine. I would
7 like to know if you're getting paid-off also as Janet
8 Mills was paid-off before she even got into office
9 and I am sure she will be investigated. She's
10 corrupt and she should not be in office. I am sick
11 of this corrupt government. I'm so tired of it, but
12 I'm never going to waste my time by voting again
13 because it doesn't do any good. This government is
14 more corrupt than North Korea and Russia put
15 together. I'm tired of white people having the
16 privilege of doing whatever they want. Have a nice
17 day.

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C E R T I F I C A T E

I, Robin J. Dostie, a Court Reporter and
Notary Public within and for the State of Maine, do
hereby certify that the foregoing is a true and
accurate transcript of the proceedings as taken by me
by means of stenograph,

and I have signed:

_/s/ Robin J. Dostie_____

Court Reporter/Notary Public

My Commission Expires: February 6, 2026

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